

ONSHIP TRACK AND FIELD SERIES
A COMPREHENSIVE LOOK

**AT
CROSS COUNTRY**

by

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OVER HILL AND DALE



ABOUT THE AUTHOR.....

In the brief span of six years, Ted Banks has accomplished a feat unheralded in the winning annals of cross country and track and field---an astounding total of 7 national championships! Included among this amazing record are consecutive NCAA cross country titles in 1975 and 1976; consecutive NCAA indoor championships in 1974, 1975, and 1976; and an outdoor victory in 1975. In addition, the Miners are perennial champions in the tough Western Athletic Conference as evidenced by 3 straight "Triple Crown" wins in the mid-70's!

Ted Banks was a 4-year cross country letterman in high school and a captain and school record holder at Mount San Antonio Junior College. After graduation from UCLA, Banks began a successful high school coaching career at Alahambra (California) High School in 1959 and entered the college ranks in 1964 at Pasadena City College. At PCC, Banks coached two national juco record holders and never lost a dual meet. After a year as cross country coach at San Jose State and another back in the high school ranks, Ted took over the cross country and track program at Long Beach State. Long Beach harrier teams won 4 straight PCAA Conference titles in cross country during this period.

It should be obvious to any reader, that Ted Banks has "paid his dues" having coached and won at all levels of competition. Experience such as this can only be gained through countless hours of dedication, sacrifice, and "paying the price" for the rewards that victory can bring. With the publication of Over Hill and Dale, the most successful collegiate cross country and track coach in America reveals for the first time the secrets to the Miner's unrivaled feats!

OVER HILL AND DALE

A Comprehensive Look at Cross Country

by

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FOREWARD

This book is going to cover cross country from beginning to end. I hope to cover all phases of this demanding sport. It is my hope that this book can help the beginning coach get some basic ideas on workout patterns. I also hope it can help him answer whatever questions he has about putting on his first meet.

But even more important, I hope that the book can serve as an inspiration to aspiring young runners.

When I was a kid just starting my running career, there weren't many books available on cross country and distance training. Today, however, the young runner has a much greater wealth of knowledge and background material to tap on distance running. Nevertheless, I have not been able to find many books devoted exclusively to cross country. This is my reason for this undertaking.

As a runner and as a coach, it is always interesting to note how fast a successful collegiate runner ran while in high school. How good is his 100 and 440 speed? What kind of work-out patterns does he follow? What is his overall philosophy?

How many times does he race in a cross country season--or indoors--or during the outdoor season?

I will devote one section of the book to some of the best collegiate runners over the past few years and have them answer some of the above questions. Perhaps the young runner can utilize some of their techniques into his own training program.

Quite frequently some will ask me - "What type of workouts do you carry out? Or perhaps, some young runner or coach will say "This part of the season always scares me. What do you suggest?"

These inquiries led me to writing this book. Also, I get a great many letters from young aspiring distance runners who want to know what one of our top runners does in training.

As I have tried to indicate in this book, there are many different ways to achieve success. The most important thing, however, is that you believe in what you are doing.

If you are a coach, take a good careful look at your personnel, their experience, your opponents, different course locations, and then plan your cross country season accordingly. Sell your kids on what you're trying to do. If you have had previous success, then this task comes easy. If you are just beginning, then I suggest you talk to the best coaches and runners and get some basic ideas from them. Remember, experience is the best teacher.

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C h a p t e r I

COACH'S PREPARATIONS FOR THE COMING SEASON

As soon as the track season is over in June, coaches should start preparing for the upcoming cross country season in September.

One of the first things that I try to do is get my schedule set for the fall. We usually try to have about 8 meets starting the first week of September and running through the third week in November. I think it is very important to plan out the types of competitions you want at various times during the year in preparation for the Conference and NCAA or state meet.

We always start with a time trial over our course just to acquaint our new people with our course. It also serves as a social mixer for our team. I always have the kids over to my house after the competition for some type of refreshments.

I do not believe in having competitions every week during the season. We feel that we can accomplish more with a bye where we can get 3-4 really hard workouts in during a week when there is no meet scheduled.

The kind of team you have is another consideration when setting up your schedule. What can they accomplish during the year? Are they good enough to win the State or NCAA Championship? If so, then this is what the schedule should point towards. If

the championship meet is to be held on a hilly course then several of your competitions should be scheduled on hilly terrain. Conversely if the big meets are to be held on fairly flat courses, then you should run the majority of your meets on this type of terrain.

After the schedule has been finalized, I then send out my first Cross Country Newsletter which tells a little about returning personnel and what prospects for the season look like. I also enclose the cross country schedule.

Sometime during the summer I try to write each of my distance kids a personal letter. If he is a returnee, I evaluate what has happened over the past year and what I feel his goals for the coming year should be.

During the month of July after all our recruiting is done (hopefully), I send out a roster of our squad with some of their statistics. (Best marks in track, number of cross country letters, etc.). I also include a little bit about training. I try to get them to increase their mileage a little bit each month.

If he is new to our program, I try to give him a few ideas about what to expect in the way of workouts, competition, and so on.

My newsletter will make mention of the type of mileage that they should be getting at various stages of the summer.

Another consideration to be attended to during the summer is equipment. I inventory my equipment and order replacements, as well as new items. This would include jersey and trunks, sweats, jocks, socks, workout gear plus shoes.

I try to buy each kid a pair of workout and meet shoes. For the big meets we use spikes and then can use them again for work-outs in track.

In August I try to get all my meet materials organized. This would include the following items:

1. Flags
2. Lime for marking
3. Place cards or tongue depressors
4. Stop watches
5. Time Sheet
6. Finish Sheets
7. Permission to use Golf Course

My last newsletter will go out about the middle of August and will include information about registration for school, physical exams, when they can move into the dorm, and so on. I try to have at least one pair of new workout shoes for every athlete the first day of practice.

We usually have about one week of organized practice before our first trial. We then move into our schedule and I publish a write-up on each competition which includes a mile by mile breakdown plus each runner's time for the race.

Most of the big meets of a college season are conducted on a golf course. These courses usually lend themselves well to spectator interest because two three-mile loops are employed. In this way spectators can see the runners at least twice without moving from the starting point of the race.

The course should be laid out so that it provides a good challenge for the top runners. The course should contain at least three or four good, steep hills, some long flat areas and some downhill portions.

Don't make a course so difficult as to pose the threat of injury to the runners. Remember that a good course helps in determining the best runners and not the ones who are luckiest in avoiding hazards.

Later chapters will deal with these problems in more detail.



World record-holder Henry Rono leads the field through the first turn at the 1976 NCAA held at Denton, Texas

Chapter II

SELECTING A COURSE SITE

It is my belief that you cannot have an outstanding cross country program over the years without a good "home course." To be able to recruit top runners you must have a course that is appealing and challenging. Most of the really successful cross country programs have a very impressive string of victories on their home course. The home course is a must for success.

A coach can have a run on talent for a year or two, but if he is to perpetuate the success of his program year after year, for a period of time he must have a good home course.

What are some of the factors that contribute to a good home course? Probably the number one consideration of the coach when he is seeking a home course is to challenge and interest the runners. If you are lucky enough to have access to a golf course, these sites are usually "ideal."

The reason golf courses are so desirable is that most of the so called "Big Meets" are run on golf courses with spikes. If your team is lucky enough to obtain a golf course for its home meets, then they can have added experience of running in spikes on a grassy surface prior to the "Big Meet" competition. It is advisable to use spikes several times in meets, and in

practice before the big meets, because running in spikes usually makes the legs sore following their use because they put you up on your toes more than flats. This usually causes soreness in the calf muscles. For this reason it is advisable to use them prior to an important meet to get the different muscles that are used with spikes accustomed to it.

Another prime consideration in selecting a course should be its suitability to spectator interest. If possible, the coach should set his course up so that interested spectators can watch a large part of the race. One word of caution regarding crowds. If you do hold your meets on a golf course, make sure that you keep the spectators off the course, out of the way of the golfers and runners. If you don't, you could lose the privilege of using the golf course.

Another factor to consider when selecting a course site is how far it is from school. Naturally the closer to school the better. However, the number one consideration should be a good course for the runners. If one has to drive as far as 10-15 miles for an ideal course, it is my feeling that it is worth it on any level.

When I came to U.T.E.P., one of the things I was not concerned about was finding a good site for our home cross country meets. The former coach had run the athletes down a dirt road 3 miles, turned around a tree and came back 3 miles. This did

not show much imagination and was not a very stimulating experience for the runner. After hearing this, I made up my mind that I had to find a good place for our home meets.

I spent many hours driving around El Paso checking out prospective areas for our home course. After much searching I secured permission to run on a nice hilly golf course about 5 miles from our campus. But, use of it was short lived, as on our first home meet my first year an over exuberant high school coach let his spectators run all over the course and we were evicted after our first meet on it. I was really sick. By this time school had started, we were into regular workout and I had no course. I searched and searched and finally got permission to use a golf course that is 18 miles one way from our campus. We have had it for six years and through careful crowd control have been able to stay out of the golfers' way.

When selecting a course one should pick an area that has some up and downhills and some flat surfaces. True cross country is over hill and dale, and through streams. The cross country course should give the student-athlete a chance to visit with nature and serve as a sharp contrast from the running around the oval in the spring.

Another factor to consider when selecting a course is "will I be able to have the same course over the years?" One of the

really fun things about cross country for both the coach and athlete is to compare times over the years.

Listed below are the top times on our home course at U.T.E.P. as compiled over the years that I have been the cross country coach.

TOP 15 TIMES BY U.T.E.P. ATHLETES

6.0 MILE HORIZON COURSE

<u>Name</u>	<u>Time</u>	<u>Year</u>
1. Wilson Waigwa	28:47	Soph 1974
2. Frank Munene	29:25	Soph 1975
3. Tony Zuniga	29:27	Junior 1975
4. Bob Wallace	29:50	Senior 1974
5. Larry Brown	29:50	Senior 1974
6. Phil Cuffe	30:04	Frosh 1975
7. Gibson Gatei	30:12	Soph 1975
8. Paul Pearson	30:28	Senior 1973
9. Jeff Dember	30:34	Senior 1975
10. Joe Gichongeri	30:40	Soph 1975
11. Sammy Maritim	30:43	Frosh 1975
12. Kip Sirma	30:48	Frosh 1975
13. Bob Moreno	30:55	Junior 1973
14. Eero Keranen	31:16	Frosh 1975
15. Ruben Dominguez	31:23	Soph 1975

Another advantage in having a home course over the years is that the athletes are able to familiarize themselves with the various mile marks, trees, stones and other familiar items that

tell them how far they have run and how much more they have to go. They can gauge their finish and other tactical moves in the race in relation to the landmarks on the course. This can only be possible if the course is used for a number of years. This is another reason why it is advisable not to change courses from year to year unless it becomes absolutely necessary.

Chapter III

RECRUITING OF PROSPECTIVE RUNNERS

One of the marks of a successful high school coach is his ability to recruit top athletes. This applies to all levels of competition.

What is a good recruiter? A top recruiter is a super salesman. He has to be able to sell his product, in this instance, cross country, and make it sound better than other sports. Don't forget, he is competing against Friday night's heroes--football.

One of the chief obstacles to be overcome by the cross country coach is to convince young men that they can run 1 1/2 to 3 miles in high school. Very few junior highs have cross country, so the high school coach will be presenting the idea to them for the first time. If he is to be successful in his recruitment of these young men, he must resort to a number of motivating factors.

One way to get a good idea as to who can run is to have a gym class cross country run once a week. At the conclusion of each period's run, the coach puts up the top 5-10 names with their times on the bulletin board. It is amazing how this creates interest among the other classes. An example, is somebody will come down and see a friend's name on the board he

thinks he can beat. The talk gets started and one thing leads to another.

At the conclusion of the day the cross country coach should take down the names of the students with the best times and contact them in reference to coming out for the team.

Another good method of recruiting runners for your cross country team is by using a record board. We have had good success with a ten deep (best times) record board by grade.

(12-11-10-9) We post it in the physical education locker room. It is amazing the number of young kids, 9-10th graders, who will come out for a tryout because they have beaten or feel they can beat someone who has their name on your ten deep list. Illustrated on the next page is a sample diagram of a ten deep record board.

Still another good gimmick is to have a "melon run" before school starts. We send out newsletters with ideas regarding workouts with news about workouts or runs for the kids who live around the area during the summer. The melon run is always the first meet I schedule and I want the kids to report to school at least one week prior to this competition for team workouts. I notify all the kids by letter and by phone. We use this first trial to see what kind of shape the runners are in and to see who will be our top seven for our first competition. Anyone placing in the top seven gets half a watermelon. Anyone who

CROSS COUNTRY BOARD

<u>By Grade</u>	<u>6 Mile Horizon Golf Course</u>					
<u>Seniors</u>	<u>Time</u>	<u>Year</u>	<u>Juniors</u>	<u>Time</u>	<u>Year</u>	
1. Bob Wallace	29:50	1974	1. Bob Wallace	30:47	1973	
2. Larry Brown	29:50	1974	2. Bob Moreno	30:55	1973	
3.			3. Don Barbray	32:51	1973	
4.			4.			
5.			5.			
6.			6.			
7.			7.			
8.			8.			
9.			9.			
10.			10.			
<u>Sophomores</u>	<u>Time</u>	<u>Year</u>	<u>Freshman</u>	<u>Time</u>	<u>Year</u>	
1. Wilson Waigwa	28:47	1974	1. Wilson Waigwa	29:59	1973	
2. Tony Zuniga	30:25	1974	2. Steve Allen	32:13	1974	
3. Jeff Dember	31:23	1973	3. Ruben Domingues	32:44	1974	
4.			4. Bobby Martinez	36:45	1973	
5.			5.			
6.			6.			
7.			7.			
8.			8.			
9.			9.			
10.			10.			

finishes the race gets a smaller piece of melon. Usually we have enough melons that everyone gets all they want to eat. We also have a melon cutting ceremony to further emphasize the success of the top runners. We take pictures of them.

In high school I usually gave shirts to the top seven runners on each of my three teams (Varsity, Junior Varsity, and Frosh). The shirts are exchanged, dependent on the placing in each week's race. The shirts are exchanged before practice the following Monday. If a boy fails to compete for any reason, he forfeits

his shirt. This idea creates a lot of friendly competition among the team members. The kid who has the shirt the most during the season gets to keep it after the completion of the season. Not only does this create interest among your own team, but it always gets a few new runners out when they see their classmates wearing the shirts. Remember the successful cross country coach recruits the year around.

Probably one of the best motivators on any level is to put the runners' names in print, whether it be the local or school paper or just a write-up for your own team. I have always made a summary write-up after every meet listing each runner, his mile time, plus a short individual comment. This write-up sheet has always been a big hit on all levels. A couple of samples are included.

CROSS COUNTRY BULLETIN

Aztec Invitational

Running without the services of Wilson Waigwa, the Miners completely devastated the field in the 32nd running of the Aztec Invitational at Balboa Park in San Diego, California.

Leading the U.T.E.P. cause, and running his best race of the year was Frank Munene. He placed second to Ed Mendoza of Arizona, in the fine time of 29:56 (only three runners have ever broken 30:00 for the tough 6 mile course). Bob Wallace in

third, Larry Brown in sixth and Tony Zuniga in seventh insured the Miners the team title. All three of these Miners ran very well. (Tony ran 1:33 faster than last year). Alex Smith showed well in his first start in several weeks running 31:19 for eighteenth place.

Although not scoring, Gibson Gatei and Jeff Dember ran gamely despite problems. Dember was 9 seconds ahead of Alex at the 5 mile, but suffered from fatigue and collapsed before the finish. With just a fair last mile he would have placed fifteenth or better. Gibson was with Tony at the 4 mile mark, but suffered blisters and ran a gutty last 2 miles to finish. Without the blister problem he could have been in the top 10-12. Hang in there men--this is one of the marks of a great team. When someone has a failure, someone else is there to take up the slack. Congratulations on a great win!

Following is a complete summary of the Aztec Invitational:

Top 10 Finishers Plus U.T.E.P.

Name

1. Mendoza - U of A - 29:19	
2. Munene - 4:36 9:33(4:57)	14:37(5:04) 20:00(4:23) 24:39(4:39) 29:56(5:17)
3. Wallace - 4:36 9:33(4:57)	14:38(5:05) 20:15(4:37) 24:56(4:41) 30:00(5:04)
4. Lawson - A.S.U. 30:08	
5. Babirucki - S.F.V.T.C.	30:13
6. Brown - 4:36 9:41(4:55)	14:46(5:05) 20:27(4:41) 25:13(4:46) 30:35(5:22)
7. Zuniga - 4:42 9:52(5:10)	15:05(5:13) 20:51(4:46) 25:35(4:44) 30:40(5:05)
8. Harper - Jamul T.C.	30:43

9.	Moury - A.S.U.	30:53
10.	Smith - S.F.V.T.C.	30:54
18.	Smith, A. - 4:42 10:00(5:18)	15:17(5:17) 21:13(4:56) 26:15(5:02) 31:19(5:04)
42.	Gatei 4:40 9:51(5:11)	15:02(5:11) 20:51(4:49) 26:05(5:14) 31:59(5:54)
43.	Dember 4:42 9:57(5:15)	15:14(5:17) 21:07(4:53) 26:06(4:59) 32:00(5:54)

Time Gap 1-5 = 1:23
 1-7 = 2:04

NCAA WRITE-UP

The University of Oregon displayed great team running in winning the 36th Annual NCAA Cross Country meet at Bloomington, Indiana. The ducks placed 1-5-6-18-44 for their decisive victory.

The University of Texas at El Paso placed third in a very strong field with 136 points. Western Kentucky was the runner-up with 110 points.

Leading the Miners cause was Wilson Waigwa running 29:52 for the hilly six-mile course. Had he gotten out a little better he could have grabbed the runner-up spot. His performance nevertheless was outstanding considering he had been out for nearly a month.

Frank Munene also gained All-American status with a fifteenth place and a clocking of 30:21. This was Frank's best race of the year and if he continues to work and improve, he will be one of the best before he graduates.

Larry Brown and Bob Wallace ran good, but not their best.

Larry missed All-American by six places grabbing the 31st position with a 30:42. Bob placed 42nd with a clocking of 30:52.

Jeff Dember was our fifth scorer in 92nd place and a time 31:32 clocking. Gibson Gatei in 101 and Tony Zuniga in 219 completed the team for the Miners from U.T.E.P.

Although we fell short of our goal to be number one in the nation, we had a fine season. You guys have done a great job all season. Our expectations were higher this year than last and that is what makes us all feel disappointed. The team battle was much tougher this year, but we did a good job. To be number 3 is nothing to be ashamed of at all.

Following is a complete summary of the NCAA meet:

Top 15 plus U.T.E.P. Finish

1. Nick Rose	W.K.U.	29:22
2. John Ngeno	W.S.U.	29:37
3. Wilson Waigwa	U.T.E.P.	29:52
4. Paul Geis	Oregon	29:57
5. Dave Taylor	Oregon	29:59
6. Terry William	Oregon	30:01
7. Mile O'Shea	Providence	30:03
8. Chris Ridler	W.K.U.	30:06
9. Ed Mendoza	U of A.	30:08
10. Randy Smith	Wichita State	30:11
11. Greg Meyer	Michigan	30:13
12. Craig Virgin	Illinois	30:15
13. Dave Long	W.S.K.U.	30:18
14. Tim Zumbaugh	Bowling Green	30:20
15. Frank Munene	U.T.E.P.	30:21
31. Larry Brown	U.T.E.P.	30:44

42.	Bob Wallace	U.T.E.P.	30:52
92.	Jeff Dember	U.T.E.P.	31:32
101.	Gibson Gatei	U.T.E.P.	31:38
219.	Tony Zuniga	U.T.E.P.	33:06

Time Gap 1-5 = 1:40

Again nice going! We had a fine season and I am proud of everyone of you. Check with me next week regarding your workout program between now and the Indoor season.

SUPPLEMENTARY BULLETIN

<u>Name</u>	<u>November of 1973</u> <u>1st Week</u>	<u>1974</u> <u>Week of Oct. 7</u>
1. Waigwa	4:42-12:45	-
2. Brown	4:42-12:45	4:40-12:35
3. Zuniga	4:44-13:01	4:40-12:41
4. Barbray	4:46-13:14	-
5. Dember	4:46-13:23	4:41-12:55
6. Gatei	-	4:47-12:55
7. Gichongeri	-	5:00-13:59
8. Courtney	-	4:44-13:49
9. Dominguez	-	4:48-14:04
10. Pearson	4:44-13:01	Not Eligible
11. Walton	4:46-13:56	Not Eligible
12. Wallace	-	4:40-12:35

SUPPLEMENTARY BULLETIN

Week of October 28, 1974

<u>Name</u>	<u>Oct. 21 Week 1973</u> <u>Horizon Workout</u>	<u>Oct. 21 Week 1974</u> <u>Horizon Workout</u>
1. Waigwa	4:42-12:45	Injured Injured
2. Muene		4:31-12:36 4:36-12:58
3. Brown	4:42-12:45	4:34-12:33 4:36-12:19
4. Wallace		4:34-12:33 4:36-12:19
5. Zuniga	4:44-13:01	4:34-12:36 4:36-12:26
6. Dember	4:46-13:23	4:35-12:48 Did not run
7. Gatei		4:33-12:36 4:36-13:04
8. Smith		4:31-13:29 4:36-13:36
9. Pearson	4:44-13:01	
10. Barbray	4:46-13:14	
11. Walton	4:46-13:56	

This is the best total team workout we have ever had at Horizon Golf Course. Keep up the good work and take care of

yourself off the field. If you do this, we can realize our goal of being the best.

Next Competition. - Saturday, November 2 at Albuquerque, New Mexico, vs the University of New Mexico. The race will be run at about 500 feet higher than the conference meet site. Let's put it to the Lobos.

TIME TRIAL BULLETIN

Phillip Cuffe and Sammy Maritim highlighted the Miners time trial over the 6 mile Horizon Golf Course last Friday.

Cuffe's winning time of 30:04 ranks him as one of the top three freshmen times ever by a Miner. This was a 39 second improvement over Phil's last effort. Maritim's time was also a 30 second plus improvement. One or either of these young men could help us before the year is over. If not this year, certainly in the future.

Eero Keranen showed a 1:44 improvement from the New Mexico dual on September 27, and may finally be ready to break through and run up to potential.

Following is a complete summary of the October 24th time trial:

Name	1	2	Turn		
			Around	5	6
1. Cuffe	4:56	9:53(4:57)	17:32	25:12	30:04(4:52)
2. Maritim	4:57	9:55(4:58)	17:42	25:43	30:43(5:00)
3. Gichongeri	4:56	9:53(4:57)	17:31	26:30	31:15(4:45)
4. Keranen	4:58	9:59(5:01)	18:00	26:11	31:16(5:05)
5. Dominguez	4:57	9:58(5:01)	(17:57)	26:14	31:29(5:15)
6. Ongaga	4:58	10:13(5:03)	18:22	26:38	31:50(5:12)

7.	Felix	5:08	10:42	-	-	34:25
8.	Braschwitz	5:02	11:13(6:11)	-	-	35:10
9.	Courtney	DNF	-	-	-	-

Congratulations to each of you. The majority of you improved greatly. This week we will work you hard. We will run at least one more trial over the 6.0 Horizon course.

There are many other methods of attracting participants to your program. Each person must do "his thing". He must do what fits his personality. He must always strive to be consistent in his behavior.

Always be yourself. Don't be afraid to admit you don't have all the answers. Be sincere, work hard and try to see what makes other coaches more successful than yourself. If you will follow these ideas, sooner or later you will be a winner.

Chapter IV

PHILOSOPHY OF TRAINING

To be a successful distance runner in this day and age, on any level, an athlete must train 365 days a year.

In order for an athlete to maintain this desire and freshness in training, he must vary the type of terrain and scenery as much as possible. He should try to run roads, in parks, by the sea, on mountain trails, or anywhere else that seems inviting. The runner should incorporate all the various patterns of workouts, such as intervals, fartlek, long slow distance and combination of the three. In this manner training will become more attractive and invigorating.

Many a young and aspiring athlete will read about what a champion does for his workouts and immediately feels that this is for him. In my estimation this is a grave mistake.

My feeling is that each runner has a different starting point and it takes a knowledgeable and seasoned coach to bring each athlete along at his own pace to reach his ultimate potential.

Success in distance running does not come overnight. Many times our best distance running is achieved after graduation from college. Patience in distance running is a virtue as it is in most anything else.

Consistency in training, day after day, year after year, is one of the keys to success in distance running. This has been proven to me time and time again throughout my eighteen years of coaching. The flash in the pan who really hits it hard day after day can only last so long. Eventually his body will break down. One must have long range goals--perhaps three to four years off, and be willing to gradually work toward them. It has been my pleasure to see kids with no more than average ability place high in N.C.A.A. competition just through hard, intelligent work completed over a three to six year period.

One example of such a runner was Ron Pryor, a runner who came on his own to Long Beach State from Millikan High School in Long Beach, California. Ron was a 9:41 high school two-miler. His Junior year he ran 27:51 for six miles and was one of a handful that met the qualifying time for the Olympic trials at Eugene, Oregon in 1972.

Another such example was Bob Wallace, a little Australian, who ran for me at Long Beach State and U.T.E.P. When Bob came over as a freshman, he was quite small and very immature. He weighed 110 pounds. He went on to be a double winner in our tough Western Athletic Conference in the 3000 meter steeplechase and the 3-mile. In the NCAA meet he earned All-American honors. These two young men are two fine examples of what hard, intelligent workouts can do for athletes with average ability.

In planning any training schedule the athlete or coach **should** have some guiding principles to adhere to in planning his **work**. It is my belief that one should adhere to the hard day, easy day principle when talking about distance running. By this I mean that day one should include a hard work session with day two of less intensity, but still covering about the same mileage as in day one. By day three the body should have recovered for another hard day. Day four would be easy and day five hard and so on through the week. We sometimes have to vary this pattern to meet individual needs. Some athletes may need two hard days followed by one easy day. Other athletes will sometimes need two easy days following a hard workout day.

One of the biggest problems I have with my Kenyan distance runners is getting them to take it easy enough on their easy day. They are so success orientated that they want **to** work hard every day. But after much explanation and talking to some of the older runners, who adhere to my pattern, I usually get the idea across and from there it is smooth sailing. The idea of packing in too many hard days have accounted for several of our Africans being injured due to too many strenuous workouts. The body just can't take it and breaks down.

Early in the season the coach should be concerned with quantity more than quality. However, I do not feel that 100 miles a week or any other figure is a so called "magic number." How much

mileage to cover can only be learned through experience, both as a competitor and as a coach and the sooner the better. Don't be afraid to try new things. It's the only way to progress. The guiding principle should be what the athlete has done in training over the past year. The coach should plan a gradual build-up in his daily program based on the athlete's past experience.

Another basic principle that I believe in strongly is that training should reflect as many different types of challenges as can be anticipated during actual meet situations. A good example of this would be knowing that in the NCAA meet with over 300 runners, we must get out in the top 50 at the first mile or we are dead. So we work on running a fast first mile in practice, during the last month and a half of the season in preparation for this situation. Another tactic that a lot of the top distance runners will employ is the fast-slow type running. In order to prepare our runners to either initiate or follow this move we work on what we call 30-40's. This means that after we get a fair amount of fatigue in a given workout we will run 440's at 70 second pace, running the first 220 in 30 seconds and jogging the second 220 in 40 seconds. It is very demanding and takes a gradual build-up both physically and mentally before the runner can handle it.

The successful coach will establish a rapport with his athletes so that he knows some of their personal habits. These

habits will have a bearing on the athlete's workout patterns. Sometimes because of a result of something that has happened off the track, it is advisable to have an athlete run easy when a hard day has been scheduled. An example of such a situation would be when an athlete has had to keep late hours studying for exams and has not been able to get the proper sleep. Rather than dig down further in the athlete's reserve, it is my feeling that the coach should have the kid run easy for a day or two and catch up on his sleep. It is for this reason that I try to check out each kid on our scheduled hard days.

If an athlete gets the flu or has been injured for a period over one week, I usually ease him back into our workout routine gradually. When a kid starts to come down with the flu or a cold, I usually have him just jog for a couple of days or maybe lay him off completely. I make sure he sees the trainer and is getting some type of medication. When he starts feeling better, we let him gradually build-up his workload over a period of time until he is ready to resume regular workouts. I always tend to be on the conservative side when bringing a kid back from the flu or colds.

When a runner complains of soreness, I usually tell him to run easy on his own and see the trainer. If it does not go away in a day or two, I then go see the trainer, so I know just what the problem is and what treatment has been prescribed. We

have had some of our better runners out for 3-4 weeks, and then brought them back to make All-American honors. Wilson Waigwa, our 3:55 miler, missed six weeks during his sophomore year from a thigh injury picked up running downhill. We laid him off for about 3-4 weeks and then started him back gradually and he placed third in the NCAA that year. James Munyala, our fine steeplechaser, stretched his Achilles tendon during his freshman year in cross country and he was out for about a month, but he came back and finished eighth. It is my feeling that when an athlete complains of soreness you should slack off in his workouts and make sure it is nothing serious. If it lingers, then lay him off, get treatment, and get it cleared up completely before he resumes regular training.

As the Championship meets approach the coach should stress quality rather than quantity. The coach should give his runners more recovery time when running quality workouts. During late season the coach must work more on mental conditioning for the big meets. A runner must feel that he has had good "quality" and "quantity" to be confident for the big meets. Don't drop the mileage too far down when working for quality.

One last piece of advice. If you were not a runner yourself, then get out and run. It will give you a great deal of insight as to what you are asking of your athletes.

Chapter V

STRATEGY

This is an area that can either make or break an individual runner or a whole team. In deciding strategy for a given cross country race the following factors should be considered: condition of your individual athletes and total team, physical condition of opponents, terrain of course and its condition, altitude involved, and strengths and weaknesses of all competitors and teams.

After considering all of the above factors, the coach and athlete must set up his race plan. However, the plan should never be so ironclad as to not allow for flexibility. The race very seldom ever breaks just the way one predicts it will. The knowledgeable coach will try to cover all possibilities that might develop during the race, and the best alternatives to cope with each situation.

I will cite our team strategy for two different "big meets" to give you an idea of how the same team may need to employ two entirely different tactics in two different situations. In our 1975 Western Athletic Conference meet we were confronted with an altitude of 7200 feet at Laramie, Wyoming. We had anticipated snow but were lucky enough not to encounter it.

The race was run on a golf course that I would term as moderately hilly. Our plan was to stay back off the pace for the first 2 to 2 1/2 miles because the first couple of miles were fairly hilly, and with the altitude factor we felt that the early leaders might run themselves out considering the conditions. So for about 2 miles our seven kids were in the last quarter of the pack and at times I thought maybe a little too far back. Our chief competitor, Brigham Young, had all of their men in the top 15. At 2 miles our runners started to move and at 3 miles we were starting to look tough and the early leaders were starting to come back. At four miles we were in good position with 3 out of the top 5 runners and at the finish we had 5 of the top ten! One of our top kids (fifth last year) had trouble with the altitude and finished sixteenth, then came back ten days later in the NCAA and placed eighth. This is where depth pays off.

In the NCAA meet at University Park, Pennsylvania ten days later we employed exactly the opposite tactics. Because the race was at sea level, a flatter course with over 300 runners we knew we would have to be in the top fifty at the first mile if we wanted to win. Five of our six men got out well by the mile mark, but Kip Sirma, our number 3 man in the WAC meet got out very poorly (almost last). At 5 miles we looked pretty good, but Washington State looked to have the advantage over us. (I

later found out that a National Cross Country Magazine, called the "Harrier," had figured points and W.S.U. had us by 17 points.) At this point I started yelling and screaming to our kids that they had to move the last mile. I told them every man counted. Our team came on very strong the last mile and Washington State dropped off a little. We moved past enough people to win by a scant four points, and without our number one man. But these two illustrations show you how different tactics are needed for different situations by the same team.

In considering pre-meet strategy the coach should go over the opponent's team with his own team in a meeting prior to departure or if it is a home meet, a day or two before the competition is to take place. In this meeting the coach should go over the team's race plan, as well as each individuals race plan.

The day before the meet is usually a light workout day. We cover 30-45 minutes of easy running. We always have a meeting. If we are travelling, I hand out the trip itinerary and go over it. We talk about the meet, the course and so on. We usually make our general race strategy plans plus individual race plans at the meeting. We always jog the course whether we are at home or away. After going over the course we may make some modifications in our "race strategy" if something is different than we expected. Examples being course changes from previous years, someone missing from one squad or both, etc.



James Munyala and Coach Banks discuss strategy prior
to the start of the NCAA meet at Penn State

Naturally the strategy would be different for a dual meet as compared to a big meet such as the conference or NCAA. In our dual meets we usually try to accomplish something in preparing for the bigger meets at the end of the season. Our Conference Championship is decided by the W.A.C. meet in November, so we try to develop from week to week to peak for this one. In our dual meets we gradually try to bring our first mile time down so that in the big meets we will be prepared to run with the leaders.

The training schedule should reflect to some extent the type of race plan that the coach is planning to use in a given race. However, it is the author's feeling that the successful team will not point for every meet during a given season, but shoot for a couple of high points that would constitute their season's goals. The workout schedule and race plan should be reflected in this work. For example, we will not schedule a meet every week and when we have a bye we try to get at least 3 very demanding workouts in during this period of time or we may workout very hard during a week when competition is scheduled and run tired, looking ahead to more important meets.

In order for the individual athlete or team to have confidence in their coach, he must have a tried and proven record as a competitor or as a successful coach, or both. If one does not have such credentials, then he should not mislead the squad into

thinking he does. He should get some advice from someone who does have a sound knowledge of the sport who is not involved in this particular competition. Like anything else, the best way to learn is to talk to the people who are successful.

If you are frustrated because you aren't winning, talk to the coaches who are winning. Have your athletes get ideas from the top runners in your area. Go to clinics, read books, and eventually you will fit the puzzle together and formulate your own philosophy of training

The workout schedule listed below is basically for the college cross country runner.

CROSS COUNTRY WORKOUT SCHEDULES

Early Season

Late August - Early September

Monday

1. Warm-up - jog 1 mile - stretching exercises
jog #2 mile - finish stretching
4 x 110 at workout pace - jog 110 interval
2. Workout - Grassy Park
 - A. 5 x 500 at 1:35, 1/2 lap jog recovery
 - B. 5 x 750 at 2:10, 1 lap jog recovery
 - C. 5 x 1000 at 3:10, 1 lap jog recovery
 - D. 5 x 750 at 2:10, 1 lap jog recovery
 - E. 5 x 500 at 1:35, 1/2 lap jog recovery
3. Shake out - 1 mile jogging

Tuesday

1. Warm-up - regular
2. Workout - A. 1 hour easy on roads or park
B. 4 and 4 x 110
3. Shake out - 1 mile jog

Wednesday

1. Warm-up - regular
2. Workout - A. 6 x 330 at 52.5, 110 jog
B. 10 mile run at 6 minute pace
C. 6 x 330 at 52.5, 110 jog
3. Shake out - 1 mile

Thursday

1. Warm-up - regular
2. Workout - A. 1 hour easy running in park,
preferably on grass.
B. 4 and 4 x 110
3. Shake out - 1 mile

Friday

1. Warm-up - regular
2. Workout - 1 hour fartlek golf course - jog -
stride - jog pattern
3. Shake out

Saturday

1. Warm-up - regular
2. Workout - 1 hour easy running
3. Shake out

Sunday

1. 12-15 mile road run, 6-6:30 mile pace
2. Shake out - 1 mile jogging

WORKOUT SCHEDULE (FIRST 2 WEEKS OF OCTOBER)

Mid-SeasonMonday

1. Regular warm-up
2. 1 hour fartlek on golf course. Hill running mechanics emphasized.
3. 4 and 4 x 110
4. Shake out

Tuesday

1. Regular warm-up
2. 1 hour easy running in park or roads
3. 4 and 4 x 110
4. Shake out

Wednesday

1. Regular warm-up
2. (1) 5 x length of Park - 3 medium pace - 2 hard (distance is about 220 slightly uphill) jog recovery same length.
(2) 5 x 1 lap of Park (about 500 yards) at 1:30 (which is equal to a 73 440 pace) jog recovery across park about 75 yards.
(3) 5 x 1 1/2 laps in 2:00 to 2:06, 1/2 lap jog recovery.
(4) 1 x 4 laps gradually building pace. Start at 73 pace. Last lap 3/4 effort.
(5) 5 x 1 1/2 laps Same pace
(6) 5 x 1 lap Same recovery
(7) 5 x length of Park as first set.
3. Shake out

Thursday

1. Regular warm-up
2. 1 hour easy running in Park
3. Shake out

Friday

1. Regular warm-up
2. Drive to Golf course where meets are held
 - (1) Run first 2 3/4 miles of course, emphasize good first mile in under 4:40, jog 5 minutes.
 - (2) 2 miles on course in 9:50-10:00. 3-4 minute recovery.
 - (3) 1 x mile in 4:50, 2 1/2 minute recovery.
 - (4) 2 x 880 in 2:20, 440 jog.
 - (5) 2 x 440 in 67-70, 220 jog.
 - (6) 5 x hill, equal jog back.
3. Shake out

Saturday

1. Regular warm-up
2. 1 hour easy running in park or on roads
3. 4 and 4 x 110, 110 jog
4. Shake out

WORKOUT SCHEDULE

Late Season (First 2 weeks of November prior to Conference or NCAA)

Monday

1. Regular warm-up
2. 1 hour fartlek at golf course, emphasize hill running mechanics
3. 4 and 4 x 110, equal jog
4. Shake out

Tuesday

1. Regular warm-up
2. 1 hour easy running on grass or roads
3. 4 and 4 x 110
4. Shake out

Wednesday

1. Regular warm-up
2. (1) 5 x length of Park - approximately 220 in length - 3 medium pace and 2 hard pace.
(2) 5 x 1 lap of Park in 1:30 (which is equal to 73 440 pace), jog 1/2 lap interval.
(3) 5 x length of Park at race pace, jog same distance.
(4) 3 x 1 lap of Park 1:30 pace, 1/2 lap recovery.
(5) 4 x 110, good speed and emphasize good finishing mechanics.
3. Shake out

Thursday

1. Regular warm-up
2. 30 minute easy running in park
3. 4 and 4 x 110
4. Shake out

Friday

Travel. Jog course of championship meet.

Saturday

Competiton - Conference Meet.

Sunday

1. Regular warm-up
2. 1 hour easy running
3. Shake out

The workout schedule listed below is for the high school runner of about average ability:

Early Season

Late August - Early September

Monday

1. Warm-up - jog 1 mile - stretching exercises
jog another mile - finish stretching
4 x 110 at workout pace - 110 interval
2. Workout - Grassy Park
 - A. 5 x 440 in 75 - equal jog
 - B. 5 x 440 at own pace - 220 walk
 - C. 5 x 440 in 75 - equal jog
 - D. 5 x 440 at own pace - 220 walk
 - E. Run 880 back to school
3. Shake out - 1 mile jogging

Tuesday

1. Warm-up - Same as above
2. Workout - 30-40 minutes easy running flat golf course
3. Shake out - 1 mile

Wednesday

1. Warm-up - regular
2. Workout - 10 mile road run - try to get everyone to cover distance. Record time for comparative purposes.
3. Shake out

Thursday

1. Warm-up - regular
2. Workout - 30 minutes easy running in park on grass
3. Shake out - 1 mile

Friday

1. Warm-up - same
2. Workout
 - A. 10 x 110 - 55 yds walk
 - B. 5 x 220 in 35-37 ~ 110 walk
 - C. 5 x 330 in 55-57 - 220 walk
 - D. 5 x 220 in 35-37 - 110 walk
 - E. 5 x 110 - 110 walk
3. Shake out

Saturday

1. Regular warm-up
2. 30-40 minute easy running on grass in park
3. Shake out

Sunday

On own (at least a good warm-up)

Mid-SeasonMonday

1. Warm-up - regular
2. Workout - 1 hour fartlek on golf course with hills - under supervision of coach
3. Shake out

Tuesday

1. Regular warm-up
2. Workout - 30 minutes easy running in Park
3. Shake out

Wednesday

1. Regular warm-up
2. 10 mile run flat - try to run 60 minutes
3. Shake out regular

Thursday

Same as Tuesday

Friday

1. Warm-up - regular
2. Workout
 - A. 5 x 220 in 35 - 220 jog
 - B. 5 x 330 in 52 - 110 jog
 - C. 5 x 440 in 70 - 220 jog
 - D. 3 x 880 in 2:20 - 440 jog
 - E. 5 x 440 in 70 - 220 jog
 - F. 5 x 330 in 52 - 110 jog
 - G. 5 x 110 - good speed - 110 jog
3. Shake out

Saturday

1. Regular - warm-up
2. Workout - 30-45 minutes easy running on grass
3. Shake out - regular

Sunday

6 - 8 mile road run

Late SeasonMonday

1. Warm-up - regular
2. Workout - 1 hour fartlek to include uphill running
3. Shake out

Tuesday

1. Warm-up - regular
2. Workout - 30-40 minutes easy running on grass
3. Shake out

Wednesday

1. Regular warm-up
2. Workout
 - A. Mile in 4:30, then go right into 10 mile road run at about 60-65 minutes
 - B. 6-8 x 110 - good speed - 110 recovery
3. Shake out

Thursday

Same as Tuesday

Friday

1. Warm-up - regular
2. Workout
 - A. Fast mile in 4:30 - 440 to 880 recovery
 - B. 3 x 880 in 2:20 - 440 jog
 - C. 2 miles in 9:50 - 1000 or 880 jog recovery
 - D. 5 x 440 in 70 - 110 jog
 - E. 6 x 110 (good speed) - 110 recovery
3. Shake out

Saturday

1. Warm-up - regular
2. Workout - 30-40 minutes easy running
3. Shake out - regular

Sunday

1. 6-8 mile road run

The workouts listed below are for Junior High cross country runners who are just getting started. They are for kids with one year or less experience. As in all my workout patterns, we adhere to a hard day, easy day approach. It is my feeling that when working with the beginning runner, the coach should always strive to give him workouts that he can run on pace and finish.

Early SeasonMonday

1. Warm-up - jog 1/2 mile - stretching exercises
jog another 1/2 mile - finish up stretching
4 x 110 with a 110 jog

2. Workout - Fartlek on golf course that is flat, jog - stride - walk as dictated by coaches whistle for 25-30 minutes.
3. Shake out

Tuesday

1. Warm-up - regular
2. Workout - 20-30 minutes jogging and walking.
4 x 110 - 110 walk
3. Shake out

Wednesday

1. Warm-up - regular
2. Workout
 - A. 10 x 110 in 20 seconds - 20 seconds rest
 - B. Walk 1 lap
 - C. 10 x 110 in 20 seconds - 20 seconds rest
 - D. Walk a lap
 - E. 10 x 110 in 20 seconds - 20 seconds rest
 - F. Walk a lap
 - G. Run 880 at own pace
3. Shake out

Thursday

Same as Tuesday

Friday

1. Warm-up - regular
2. Workout
 - A. Run an 880 on course - walk 440 - Repeat 4 times on course - no time
 - B. 6 x 110 good speed
3. Shake out

Saturday

3-4 miles road run

Sunday

On own

Mid-SeasonMonday

1. Warm-up - regular
2. Workout
 - A. 6 mile road run course at 6-7 minute mile pace
 - B. 6 to 8 x 110 - 110 jogging
3. Shake out

Tuesday

1. Warm-up - regular
2. Workout - 20-30 minutes easy running on grass
3. Shake out

Wednesday

1. Warm-up - regular
2. Workout
 - A. 20 x 110 in 20 seconds with 20 seconds recovery
 - B. 1000 yards in 3:00 - 3:30 - 440 walk
 - C. 6 x 110 good speed - 110 jog
3. Shake out

Thursday

Same as Tuesday

Friday

1. Warm-up - regular
2. Workout
 - A. 5 x 110 in 20 seconds - 20 seconds recovery
 - B. 5 x 220 in 35-40 - 110 walk recovery
 - C. 5 x 440 in 80 - 220 walk recovery
 - D. 5 x 220 in 35-40 - 110 walk recovery
 - E. 5 x 110 in 20 seconds - 20 seconds rest
3. Shake out - regular

Saturday

3-4 mile road run

Sunday

At least a road run

Late SeasonMonday

1. Warm-up - regular
2. Workout - 30-45 minutes fartlek as dictated by coach's whistle. Jog - stride - walk pattern.
3. Shake out - regular

Tuesday

1. Warm-up - regular
2. Workout - 20-30 minutes easy running in park
3. Shake out

Wednesday

1. Warm-up - regular
2. Workout
 - A. 5 x 110 in 20 seconds - 20 seconds rest
 - B. 5 x 220 in 35 - 110 walk
 - C. 5 x 330 in 52 - 110 walk
 - D. 5 x 220 in 35 - 110 walk
 - E. 5 x 110 good speed - 110 walk
3. Shake out - regular

Thursday

Same as Tuesday

Friday

1. Warm-up - regular
2. Workout
 - A. 6-7 mile road run at 6-7 minute mile pace

B. 4 x 110 good speed - 110 jog
3. Shake out - regular

Saturday

Warm-up

Sunday

On own

Chapter VI

PSYCHOLOGICAL ASPECTS OF RUNNING

In the fall of 1975 we went to the NCAA Cross Country Championship at Penn State and we were one of the pre-meet favorites. But, prior to our arrival at College Park, few people realized that we were without our number one man, Wilson Waigwa. He had re-injured his leg in the Conference meet and could not walk normally. I did not know how the team would respond without him. I knew that if they all ran up to their capabilities we could still be in the top five.

We did everything as we always do at a National Championship in cross country. On Saturday night after flying all day we checked into the hotel, ate dinner and loosened up around the campus of Penn State. On Sunday we jogged over the course that we would run on Monday. I pointed out different places on the course and how to run strategically on the course. We went back to the hotel to relax until meet time Monday.

We went to the course at 9:45 AM so that we would have about 1 hour before race time to get ready. As soon as we got there the athletes started warming up. At 10:30 AM they got their spikes and reported to the starting line. I went over each athlete's individual assignment and then gave them a short "pep

talk" as a team. Then, James Munyala, the man who had run number one for us in the Conference, got the team together after I had left. I asked him afterwards what he told them and he said that the essence of his talk was "to never give up, even if you get spiked or stepped on, just keep running." Well I don't know whose talk did it, but the rest is history. At the five mile mark Washington State had us by about 17 points according to the Harrier Magazine. I started yelling and crying and shouting for the team to move. Kip Sirma, who got a terrible start had shown tremendous courage by working his way up through the pack and was now in contention. Our kids moved well the last mile and the Cougars fell back a little, and we won by a couple of points to win our first National Championship in cross country. The athletes were really ready both physically and mentally.

The psychological aspects of running is an area of conditioning that neither the coach nor the athlete can afford to neglect in preparing for competition.

Various percentages have been assigned to the physical as well as the psychological importance of the various areas of conditioning. Some authors have placed as much as 80 per cent importance on the aspect of psychological preparation for readying the athlete for a given performance. This means that physical considerations approximated only 20 per cent of the total preparation value.

This is a mute point, and of course their importance varies with each athlete and with the level of competition. Let's suffice it to say that the psychological aspect of conditioning is extremely important and should not be ignored.

Now that the importance of mental conditioning has been established, we must strive to find ways to develop this area of the conditioning process.

One of the best ways to develop confidence in a runner is to have him go through a tough workout. For example, many coaches believe that if a miler can run 12 x 440 in under 60 seconds with a 220 recovery jog, then he is ready to run under four minutes for the mile. This isn't necessarily so. This type of a workout can certainly give a runner confidence to run well, but I personally feel that for a runner to be ready to break four minutes, I would have to check him out on some other types of workouts. His "frame of mind" before the race would also be of paramount importance. However, the point of having already run a good workout is certainly one way to build confidence.

Another area that the coach and athlete must consider when thinking of developing a runner's full potential is the use of self analysis. Just what does the runner feel about himself not only as a person, but as a runner. Regardless of what an athlete can do on the track, he must believe in himself as a person or he will not perform up to expectations.

In any form of self analysis both the coach and athlete must be objective in their evaluations if they are going to realize optimal results.

One of the key things to consider in the development of any runner is not to get too eager or anxious. Many athletes have failed to realize optimal results in their performances because of trying to go too fast too soon.

This particular point brings to mind a young high school runner who had been running very well in the mile. It was decided that he should go after the national record in the two mile. For about six laps, he was right on pace, but then he started to falter badly. Not only did he lose the race, but he failed badly with a 9:23 clocking. Someone was totally unrealistic in preparing this young man for his record attempt. Things like this can set an athlete back many months in preparation, both mentally and physically. If the setback is traumatic enough, the athlete may never completely recover. This is why it is so important to know your athlete and be sure that he can do what you set out for him to achieve. This is another good reason why I am always on the conservative side when setting goals for my athletes.

The job of getting a runner to realize his full potential is made much easier if the athlete and coach have mutual respect for each other. It is my belief that a coach must be a living example of what he expects from his athletes. If he wants them to be

dedicated then he must not be afraid of working hard. If the coach was an outstanding runner or has been very successful, then his job is much easier as compared to the less successful coach.

But, regardless of how successful a coach has been, he is still judged on the individual achievements of each athlete. It is for this reason that the coach must consider each runner as an individual. Try to program his development to meet his individual needs, both on and off the track. In this way the chances for success will be enhanced.

I always get a kick out of the coach who takes the credit for a great coaching job when one of his kids breaks a record. Yet, late the same day or the next week the same coach will blame another youngster for his own inability to perform up to expectations. Let's face it, anytime an athlete excels or fails, we as coaches have had some effect on the final outcome. If the athlete excels, don't get too "big headed." If he fails, try to be objective in your analysis and figure out where you went wrong. Then talk it over with the athlete and get back on the right track.

Usually a youngster wants to excel very badly. He wants to please the coach by performing well; much more than you realize. So if he fails, go easy on him. He puts in a lot of hard work and being too harsh on him can sometimes be extremely detrimental to his future development.

C h a p t e r VII

YOU MUST KNOW YOURSELF

One of the most important things for a young distance runner to learn is "getting to know himself." What are his capabilities? Can he run 4:10 in the mile or 8:55 in the 2-mile while in high school? Does he "psyche himself out" on tough hills? Does he lose contact with his opponents whenever there is a steep downhill grade? Does he always get "outkicked" at the finish of almost every race?

In a coaching season, I have cross country from September through November, indoor track from January through March, and outdoor track from February through June. Consequently, I don't have as much opportunity to run and enjoy myself during the indoor and outdoor track season as I do during cross country or the summer months.

Recently I had a chance to do more running and think about some of the ideas I believe are important in developing a good distance runner. While running, I began to reflect on the techniques that helped me as a young runner.

One of the things that every runner must do is hard work. A good runner is usually the end-product of hundreds of miles of running and training. The distance runner must work regularly

throughout the year--365 days of running, unless he is injured or completely exhausted from the competitive season.

As one covers the miles of running, he must learn to test himself in his workouts as he would expect to be tested under actual race conditions.

Hills generally pose a problem to many runners, perhaps more psychologically than physically. The young runner must experiment on the hills to prove to himself that he can overcome them. He must concentrate on good running mechanics and not think about the length of the hill. Once a runner learns to run hills properly and realizes that it is him against the hill, he has learned a valuable lesson in overcoming this particular barrier.

There are some runners who feel at home "over hill and dale" that do not excel in track. Many of these types of runners do not have great basic speed on the flat, but are very tough mentally and physically. Because of these attributes they can break away on the up or downhill from faster flat runners.

Several years ago we had a young Canadian runner by the name of Larry Brown on our team. Larry made All-American in cross country, but did not come close to achieving this honor around the oval in the spring. In most cases the athlete who has outstanding track credentials will do well in cross country. However, there have been some exceptions. One was our world record

holder in the mile, Jim Ryun. Jim never ran the kind of cross country he should have, considering the outstanding track times he recorded.

Sometimes when a program changes leadership in coaching one can see drastic changes in performance. We had one such case when I took over at U.T.E.P. We had a runner by the name of Paul Pearson who was a 4:04 miler. In his Junior year in cross country he had placed 36th in the Western Athletic Conference meet. When I came to U.T.E.P. he made it plain that our goal was to have a strong cross country program. Paul became an integral part of our success. He placed 5th in the Conference and 36th in the NCAA. Quite a difference from one year to the next. Much of his improvement can be attributed to a greater emphasis on the sport.

Seldom are races really lost by an opponent beating you. Many times we beat ourselves. But once we get to know ourselves, accept the challenges, beat the hills or the course, and learn to maintain a certain pace in a race and "kick" the last portion, then we are ready to beat almost any opponent.

Remember that you can only do your best, no one can ask for more. If you run up to your maximum potential every time you race, you will be successful. Too many runners beat themselves by making excuses - the early pace was too fast, the hills were too steep, it was too hot and smoggy, and so on. Everyone has

to run under the same conditions. If you learn to accept the good with the bad, you can out-perform many athletes and will have learned a valuable lesson that when applied later in life, will be very beneficial.

Chapter VIII

MEET ORGANIZATION

In the organization and staging of a cross country meet the coach must plan sufficiently so that everything will run smoothly the day of the meet.

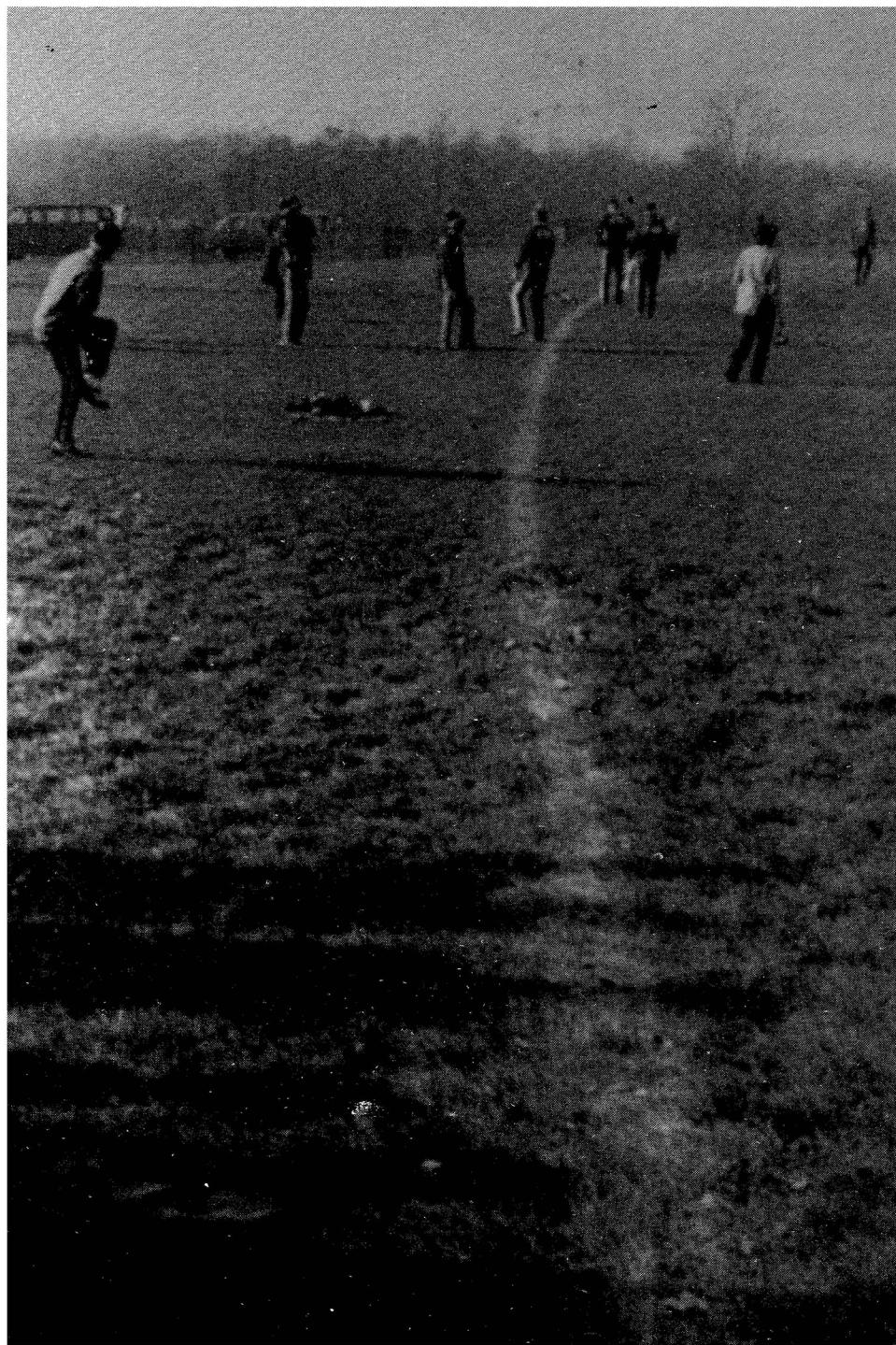
One of the most important things that a coach or one of his aides must do is to insure that the course is clearly marked so that the opposing team or teams will have no difficulty in knowing the proper course and direction. The course should have a solid chalk line over the entire distance. There should be colored flags for every turn. In any meet involving more than two teams, a chute should be used. The finish line should be at the mouth of the chute with a finish judge at the line to determine places. Once they have passed the finish line another person should make sure that they stay in order of finish, single file until their place and school is recorded at the end of the chute. Place cards may be given at the mouth of the chute or the recorder can just put them in order of finish on the score sheet. If a chute is not used in a dual meet, two officials should be provided to hand out place cards. One official should hand out the even numbered cards, one official the odd numbered cards. They must coordinate their efforts and decide who finishes in each place.

They determine places by the cards they hand out. After the last runner has finished, they then report to the recorder who records name, order of finish, and school. The times are then taken off the time sheet and the results are complete. Each school should be provided with at least one copy of the complete results. The host school should also make available course guides the day before and the day of the meet in the event any of the visiting teams or athletes wish to be shown over the course prior to the competition.

When making the cross country course, I believe that the best method of demarcation is with a continuous chalk line over the entire course with flags posted at each turn. This method of marking eliminates a lot of problems in the long run. Although the initial job of going over the entire course is a chore, it will eventually save the coach many headaches.

Another prime consideration in staging a home cross country meet is to have on hand the personnel needed to properly put on a well supervised meet. Naturally fewer people are needed to put on a dual meet than a big invitational or conference championship meet.

Regardless of the size of the meet, a good starter is needed. If the pack does not get a fair start, then it is the starter's responsibility to fire a "recall." This permits a second start, giving everyone a fair chance. The start of the race is usually



The continuous chalk line as shown above demonstrates the proper method of marking a cross country course

the time when the runners are most vulnerable to injury either by being bumped or getting knocked down. The recall stops the race and lets the runners know that just such an accident has occurred. They should be instructed to return to the starting line once again. The recall also prevents the anxious runners from getting an illegal jump to get out ahead of the pack.

Judges are needed at critical points on the course to direct the runners and see that no one "cuts" corners or across designated boundary lines. There should be at least one finish judge whose main job is to determine the order of finish in any tight races.

At the finish line, people are needed to hand out place cards to the runners as they complete the course. In a small meet two people are sufficient for this job.

A recorder and a scorer finish out the list of personnel needed at the end of the finish chute. The recorder will take the place card and record each runner's name and place on the score sheet. After every runner has turned in his place card, the scorer will then tally up the scores of all schools. If you are short of personnel, the recorder can also tally the scores.

The host school should set up the finish cards, score sheets, at least two stop watches, and results sheets the day before the meet.

At the conclusion of the meet the host school should give each participating school at least one complete copy of the results. This includes every runners place, time, and the final score.

Another responsibility of the host school is to make sure that the school and local papers are aware of the meet and that sufficient publicity is provided so that spectator interest can be generated.

The host school should make allowance to have a trainer at the meet and medical supplies in case of any accidents. Allowance should be made for a doctor to be "on call" for all home meets.

We always have a team meeting on Thursday, two days prior to competition. At this meeting I hand out an itinerary for the trip and go over all travel plans. Time of departure, mode of transportation, estimated time of arrival, etc. If we are driving to the meet, I assign drivers and make arrangements to pick up the cars. I also assign a person to pick up the sack lunches, cold drinks, and ice chests. If we are having a home meet, I go over the starting time of the meet and the time that I want the team to be at the course for warm-ups. I make sure that everyone has a ride because our course is 18 miles from campus. If there are any equipment needs, they should be taken care of after Thursday's workout. I issue uniforms after the melon run before

The following is an example of an itinerary for the travelling team:

ITINERARY FOR ARIZONA STATE MEET AT TEMPE, ARIZONA

Departure - Leave from Burges Hall parking lot on Friday, October 3 at 8 AM. Make sure that you have all your meet gear. Pick up a sack lunch before leaving. Cokes will be in each car. Upon arrival in Tempe we will assign rooms at the Newton Sands Hotel where we will be staying. Estimated arrival time is 3 PM. Newton Sands, 3320 E. Van Buren, Phoenix, Arizona, 602-275-7848. As soon as we get checked into our rooms and change, we will go out and jog the course. Upon returning from the course you will shower and we will eat dinner as a team at 6 PM.

Saturday, October 4 - Leave from Motel for course at 9:45. Arrive at course approximately 10 AM. Warm-up for 11 AM race. After meet, we will get results, shower, and eat. Departure time for El Paso at about 2 PM. Arriving home about 7 PM.

Travelling Squad

1. Wilson Waigwa
2. James Munyala
3. Frank Munene
4. Tony Zuniga
5. Kip Sirma
6. Gibson Gatei
7. Jeff Dember
8. Don De Yampert - Trainer
9. Ted Banks - Coach

Any questions, see me.

we have our first real meet with another school. But, if there is a chance of bad weather, then I might need to issue "foul weather" jackets. I try to spell everything out during our Thursday meeting.

Here is an example of a Score Sheet that was used in our 1973 Conference meet at Brigham Young University. As you can see it has the place of each athletes finish, last and first name, his time, and the breakdown of how each team scored on the second page.

W.A.C. CONFERENCE CROSS COUNTRY CHAMPIONSHIP

Cross Country Score Sheet

Date Nov. 30, 1973 Course Distance 6 miles Course Record _____Weather good 65° Site Wasatch Mtn. State Park, Midway, UtahCondition of the Course Golf course--good condition

<u>Place</u>	<u>Name</u>	<u>School</u>	<u>Time</u>
1	Brown, Larry	UTEP	30:09.8
2	Mendoza, Ed	UA	30:54.3
3	Waigwa, Wilson	UTEP	30:54.8
4	Groarke, Louis	CSU	31:06.5
5	Lawson, Larry	ASU	31:13.6
6	Cramer, Gary	BYU	31:18.4
7	Pearson, Paul	UTEP	31:26
8	Salazar, Faustino	UNM	31:31.5
9	TeKacl, Tom	UU	31:41
10	Jensen, Steve	BYU	31:44
11	Webster, Dave	BYU	31:55.8
12	Floto, Steve	CSU	32:05
13	Zuniga, Tony	UTEP	32:05.3
14	Franklin, Woody	BYU	32:18.5
15	Johnson, Dave	BYU	32:18.8
16	Miller, Jay	UNM	32:25.8
17	Schnell, Jeff	UU	32:30.6
18	Franck, Bob	ASU	32:31
19	Harris, Tim	UA	32:39
20	Allison, John	UNM	32:45
21	Segura, Matthew	UNM	32:49

**W.A.C. CONFERENCE CROSS COUNTRY CHAMPIONSHIP
SCORE SHEET CONTINUED**

<u>Place</u>	<u>Name</u>	<u>School</u>	<u>Time</u>
22	Babiracki, Dave	BYU	32:50
23	Bradford, John	UA	32:53
24	Arebalo, Ed	UA	32:55
25	Stalter, Ken	UNM	33:03
26	Lohman, Mike	CSU	33:09
27	Bartray, Don	UTEP	33:11
28	Sigley, Randy	CSU	33:18
29	Carpenter, Kit	CSU	33:25
30	Bjordlund, Mark	UNM	33:26
31	Morrison, Mike	UA	33:32
32	Dember, Jeff	UTEP	33:34
33	Cummings, Paul	BYU	33:37
34	Black, Legrand	UU	33:42
35	Steele, Bob	CSU	33:44
36	Maandag, Will	Wyoming	33:51
37	Hybertsen, Steiner	Wyoming	33:59
38	Pauve, Bob	Wyoming	34:14
39	Auebalo, Abelardo	ASU	34:16
40	Rafferty, Mark	ASU	34:20
41	Schmitt, Steve	ASU	34:23
42	Ortez, Phil	UNM	34:37
43	Walker, Jim	UU	34:42
44	O'Callaghan, Mike	UA	34:46
45	Pease, Bill	Wyoming	35:02
46	Brouillet, Bill	UU	35:23
47	Walton, Hollie	UTEP	35:35
48	NOT REPORTED		

**W.A.C. CONFERENCE CROSS COUNTRY CHAMPIONSHIP
SCORE SHEET CONTINUED**

<u>Place</u>	<u>Name</u>	<u>School</u>	<u>Time</u>
49	Bodner, Bala	Wyoming	36:05
50	Smyth, Berry	Wyoming	37:10
51	Naylor, Robert	UU	38:53
52			
53			
54			
55			
56			
57			
58			

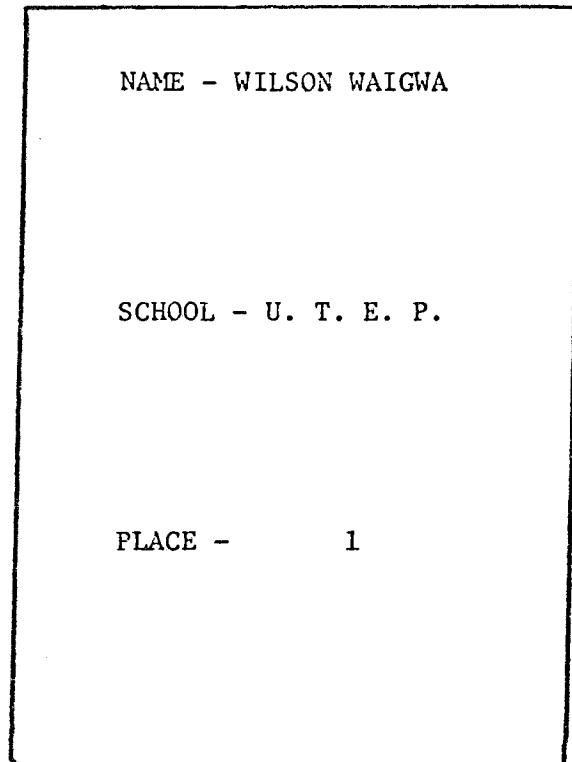
Team Scores

UTEP	1st	51 (1-3-7-13-27)
BYU	2nd	56 (6-10-11-14-15)
NM	3rd	90 (8-16-20-21-25)
CSU	4th	99 (4-12-26-28-29)
UA	4th	99 (2-19-23-24-31)
ASU	6th	143 (5-18-39-40-41)
UU	7th	149 (9-17-34-43-46)
Wyoming	8th	204 (36-37-38-45-48)

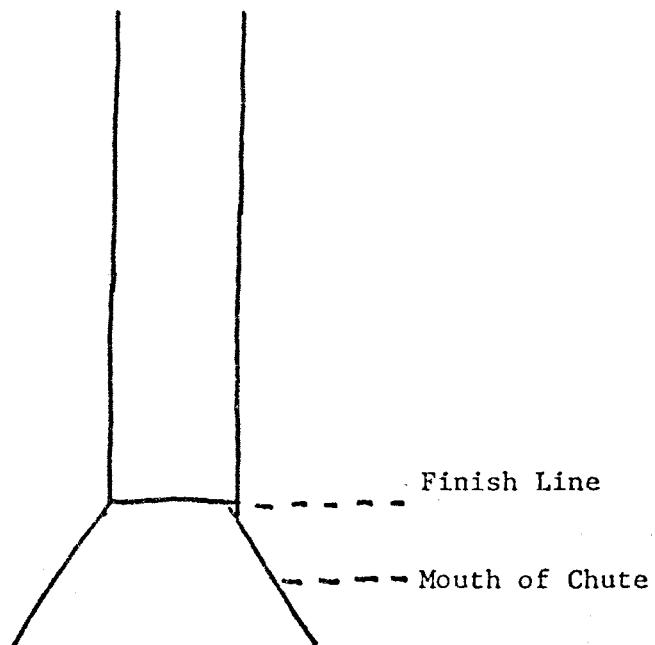
TOP FIVE INDIVIDUALS

1. Larry Brown UTEP
2. Ed Mendoza UA
3. Wilson Waigwa UTEP
4. Louis Groarke CSU
5. Larry Lawson ASU

Here is the type of place card that we use at U.T.E.P. for our dual and triangular meets.



Here is a diagram of a finish chute that is a necessity in cross country meet that has more than two teams.



The mouth of the chute in front of the finish line should be about 6-8 feet wide. It should be wide enough to accommodate 4-5 runners finishing at the same time. The finish line is where the official time will be given. The chute should narrow at this point so that the runner can support himself on the ropes of the chute. There should be plenty of supporting poles to make the chute ropes sturdy enough to take the punishment and abuse that 200 or more runners would give it. In big meets such as the NCAA, double chutes should be utilized. The only problem that can arise here is that the officials must be sure to keep track of where

they break off the finish and do not get confused in recording
one chute in front of another.

Chapter IX

COACH - ATHLETE RELATIONSHIP

The key to success in any walk of life is dependent on one's ability to relate to people. This certainly holds true in the field of coaching.

I feel that in order to get the most out of a potential student-athlete, the coach must understand what makes the athlete "tick." By this, I mean the coach must learn what is important to the athlete.

After the coach learns some of the pertinent facts about the athlete, he should also try to learn about the athlete's family situation. How he feels about his father and mother, how many siblings there are and the athlete's feelings towards them.

For the coach to glean all this information is very time consuming. It cannot all be done just at the practice field or "meet situation." For best results the coach should encounter the athlete in as many different situations as possible.

I have team dinners, team trips, individual dinners or trips, and I may pick up some pertinent facts about one of my athletes through casual conversation with the individual involved, or through one of his friends.

Because all of this is paramount for success, it is very important that a coach enjoys people, and be able to get along well with them. If he does not, then it is difficult to have a genuine interest, and if you are not sincere with people they soon realize this.

Once the coach has some understanding of the athlete, he must then ascertain how important track is to the individual. If track is important and the athlete wants very much to succeed, the coach's job is much easier. If the athlete has track very low on his list of priorities, the coach must work very diligently to change this situation or chances for success with the individual will be quite limited.

It is my belief that the coach must always be truthful in anything he tells his athletes, but this is not always the easiest thing to do. For example, when an athlete runs near tail-end in a big meet, and the officials do not time him, it would be easier for all concerned to make up a fictitious time. But, I do not believe in this. If an athlete runs poorly, he should learn to take the good with the bad. After all, one of our jobs in this business is to prepare these young men for life. To always make them think they did the job would be setting them up for a fall later on. This is why I believe in always telling my athletes the truth whether it be for better or for worse.

When an athlete does perform poorly, the wise coach will use it to his benefit and make a point to aid the future development of the athlete.

Very seldom do we improve an athlete by being negative. We should always try to find something positive in any performance. If there is nothing, then point out the errors, but do it on a one to one basis. Do not embarrass the athlete in front of his friends or fellow athletes.

In many instances the coach can say little or nothing at these times. The coach should always avoid commenting if he is emotional, because many times this is when the coach will say something in the heat of anger that will be damaging to the coach-athlete relationship.

I can remember an incident very well that perfectly illustrates my point. About five years ago when we were at the NCAA Championships in cross country, I observed the following incident: One of the PAC 8 schools was a pre-meet pick to win the championship along with U.T.E.P. and Oregon. The team in point had a foreign runner who had been an All-American the year before, but ran sub par on this particular day. When he had finished the race, his coach proceeded to "chew" him out in a very degrading way. It was not only embarrassing to the coaches standing around, but to the other team members. The athlete was in a state of

shock. Needless to say, the athlete never performed well again during his remaining two years of eligibility.

The coach used very poor judgement and completely "killed" the runner's pride. We can understand how badly a coach feels when he is a pre-meet favorite and loses. But, it will happen more than once in our profession. This is a time when the coach must keep his cool, or he will never be a big winner.

Being realistic is another very important consideration in the functioning of the coach-athlete relationship. Many coaches get carried away when setting goals for their athletes. They feel that everything they touch turns to "gold" so to speak. Some are very successful, and lucky, but we should never lose sight of where the athlete is right now.

When a coach sets a goal for one of his athletes, whether it be a short term or long term goal, he should be very objective and realistic about where the athlete is at present in his athletic development. He should take one step at a time in his setting of goals. I would rather have my athletes surpass their goal and say coach "I could have run much faster" than have him fall short and be disillusioned.

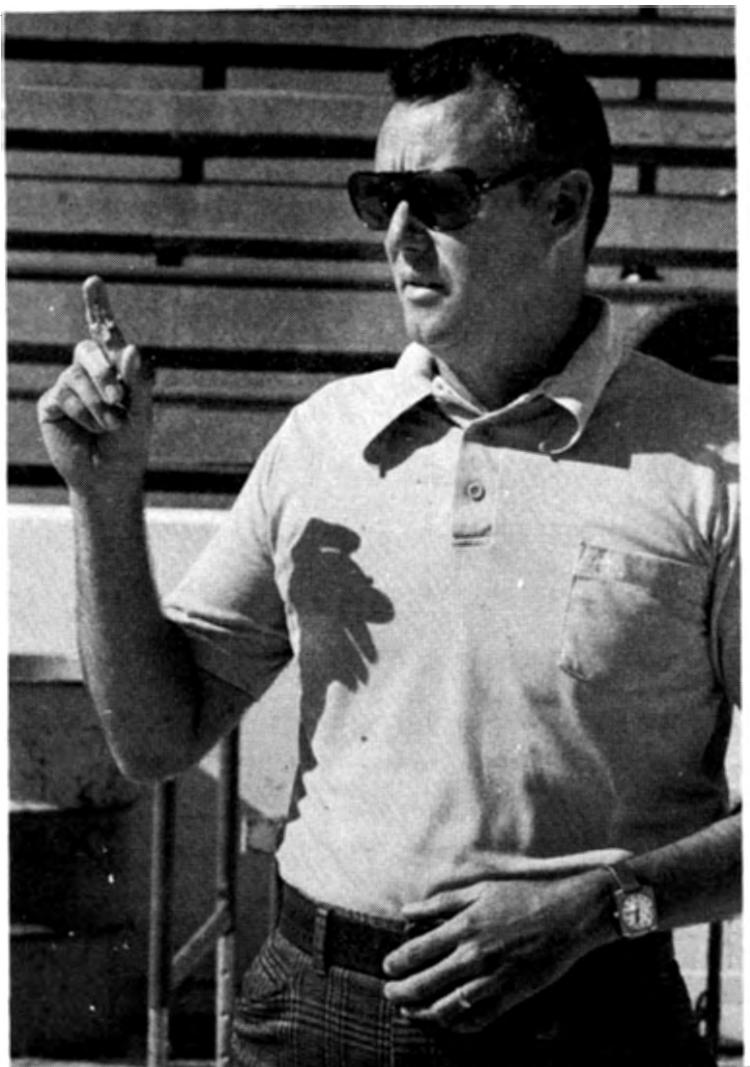
The crux of the whole relationship is the coach must believe in the athlete and the athlete must have faith in his coach.

Every athlete and coach experiences setbacks or defeats. This is the time when both parties must show their maturity and figure out their mistakes and work from there.

I think a very good illustration of coach-athlete confidence was experienced by me and one of my athletes. We had a young man from El Paso, Tony Zuniga, who had been the State Champ in Texas as a senior, both in cross country and the mile. When he came to U.T.E.P., he ran very well as a freshman and placed 79th in the NCAA meet. As a sophomore, he improved a great deal, but had a bad race in the 1974 NCAA and placed 208th. This hurt us as a team and we placed third after being one of the pre-meet favorites. Naturally, Tony felt very bad, as we all did. When we went to Pennsylvania for the NCAA Cross Country Championship the following year, we had set his goal to make All-American, which is the top 25. Upon our arrival at Penn State we picked up the "Harrier" which is a National magazine on cross country. The magazine featured the prognosis for this year's NCAA meet and it had U.T.E.P. as one of the favorites. It also went on to elaborate how Tony had let us down during his sophomore year and because of his dismal showing we placed only third.

When I saw the article I was very disturbed. I found Tony as soon as I could and showed him the article. We talked it over and I tried to get the race in proper perspective and tried to get him to realize that the article should not change any of his pre-meet preparations or thinking, but I was worried about how it would affect him.

To make a long story short, Tony placed 25th and made All-American. We also won the team title. At five miles we were second to Washington State, but in the last mile we ran very tough and they faded. Our runners had faith in themselves, as well as me, and it paid off. I sincerely believe that they ran this way because they were better prepared mentally and physically.



The most successful intercollegiate cross country and track coach in the United States--Ted Banks of Texas-El Paso

Chapter X

PHYSIOLOGY OF EXERCISE

If a book on cross country and distance running is to be complete, it must cover some of the physiological factors to consider in training.

The question of the "warm-up" is something that has come under some attack since one of the top quarter-miler in the United States, Mike Larabee, ran some outstanding times with little or no warm-up.

Being from the old school of thought, I believe a warm-up is necessary. Some people feel that the warm-up is more a psychological than a physiological factor. But regardless of which, if it aids the athlete in his performance, then it is good.

The most important things that I believe can be accomplished in a warm-up is to get the blood circulating in the muscles so that when the athlete starts into oxygen debt, the blood will be deep in the muscles and can carry away the lactic acid sooner, thereby, allowing the athlete to run faster and longer than if the main supply of blood were in another area of the anatomy as well as on the skins surface.

Another very important factor to consider as part of the warm-up is the stretching of the muscle groups that will be actively

involved in the activity. The stretching of the muscle groups involved, plus jogging, plus more stretching, plus some build-up running at race pace constitutes a good warm-up in my way of thinking. Listed below is what I consider a good warm-up. The amount and intensity of each will depend on the event. Different stretching exercises would be added according to the event.

Typical Warm-up

1. Jog 1/2 mile to a mile.
2. 15-25 minutes of stretching exercise.
3. Jog 1/2 mile to a mile.
4. 15-20 minutes of stretching. More if not good and loose.
5. 110's at race pace. Could be build ups or windsprints for sprinters, quartermiler, hurdles.
6. Keep moving and keep sweats on for 10-15 minutes.

Another important consideration when we discuss the physiology of exercise as it pertains to distance training is the heart rate. When trying to condition an athlete's cardio-respiratory system for a top performance, interval training must be part of the training program. When doing intervals of short duration, the coach should strive to get the heart rate of a well conditioned athlete up to 180 beats per minute. Before the athlete repeats a "bout" of this nature his heart rate should be down around 120 beats per minute. When the athlete can no longer return to 120 beats per minute then the training session should be ceased. If an athlete is not attaining 180 beats per minute after his short

C h a p t e r X

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But the main objective of the "shake out" is to get rid of some of the lactic acid that has built up from the afternoon training session. The shake out enables the runner to better perform the next day's workout, too.

On different occasions I am sure that many of us have had to rush off from a given workout before we have completed our "shake out", or perhaps we have omitted it completely. The next day the athlete feels horrible in the workout. But as the workout continues, he feels better. This is due to the additional lactic acid that causes you to feel sluggish. It would have been eliminated by a "shake out" the day before.

C h a p t e r XI

CLIMATIC CHANGES, ALTITUDE AND HOW TO ADJUST

Having never lived in an area where the weather gets very severe, my experiences are limited to various invitationals and national type meets that I competed in as a runner, or that my teams have participated in over the years.

While coaching in California, we seldom, if ever got snow. We did get heavy rains on occasions and I always expected the runner to workout and I would be there, too. It was my feeling (and I sold the kids on it) that we could get ahead of our opposition if we ran on rainy days, because many of our opponents would do little or nothing. However, I must point out that the positive effects can be lost by running the athletes in the rain if they get sick. So for this reason, the coach must make sure that all of his runners are well dressed with sweat suits, waterproof jackets, stocking caps, etc. We usually conducted our warm-up in the gym or halls, and then took off on a group road run.

Not only was it good for them physically to maintain some type of workout regardless of the weather, but many times it is mentally refreshing to have a change of pace like a run in the rain. The psychological toughening that takes place when an

athlete completes a good "workout" or a worthwhile run in a meet is also quite beneficial to the total growth of an athlete. But, make sure that you as coach do everything you can to structure these situations so they are a positive experience when possible. In California, the days are limited for these possibilities.

As far as running in the snow, my experiences are also quite limited. We have had several occasions where we ran national meets in very bad weather, and I will pass on what we have learned from these experiences.

First of all, if you are unfortunate enough to live in the snow country, then you will have to have additional workout gear as compared to a mild weather condition locale.

The runner who plans to maintain a day to day training program in the snow country will usually have to have "double sweat suits." The outer one preferably of the rain suit variety with a lining. He will have to have some type of a hat, preferably a stocking cap and perhaps a snow mask during the real cold weather. He will have to have thermal socks and shoes with some type of tread sole to help prevent slipping.

With this type of weather and the clothing necessary to keep warm, any type of "quality work" is out of the question. But, the athlete must bide his time by running long and slow until better weather prevails, then the quality workouts can be attempted. If one is lucky enough to have an indoor track facility, then the

interval work can be done indoors. If not, the school halls or gymnasium might be used. If none of these types of facilities are available, then the athlete must be content to just run long and slow until conditions improve. The prolonging of the quality work until warm weather prevails will cause the "cold weather" athlete to peak later in the year.

One of the most difficult adjustments a distance runner has to make is to altitude. This was witnessed by many of us in preparation for the Olympics in Mexico City. I have had much first-hand experience the last four years in the Western Athletic Conference. The Arizona schools are the lowest in altitude being less than 2000 feet. El Paso is next at 3900 feet. The Utah schools are about 5200 feet, with New Mexico about 5500 feet. Colorado State is about the same and Laramie, Wyoming is at 7200 feet. In my opinion having one's school located at altitude is a real plus for training distance runners.

According to an article in June 1976 Track Technique by E. C. Fredericks, the combination of endurance training and altitude acclimatization can produce "super-normal" performances. The training at altitudes produced a 50 per cent increase in the areas that are deemed important to distance running success. But what about the poor athlete or team that is located at sea level and must perform at altitudes greater than 5000 feet. The effects can be disastrous. Take the University of Arizona at

Tucson. For the last couple of years their cross country team has been quite representative on a National level when competing at sea level. However, when they go to altitude they fail miserably. Going into the 1975 W.A.C. meet in cross country the University of Arizona team had only one loss at sea level and that was to us, and we went on to win the National Championship without our number one man. But when it came to our Conference meet at Wyoming, they were a badly beaten sixth place finisher. What happened? The answer is pure and simple--altitude! But how much of their problem was physical and how much psychological. This is very difficult to determine. However, I do believe that if possible, a coach should take his athletes to altitude to train if possible. The minimum length of time that would be beneficial would be about three weeks. If this is not possible, then the coach should give his team very demanding interval workouts with very short recovery. He should take his team to as many races at altitude to experiment with different race plans so that when the "big meet" comes, his team will have as much knowledge of altitude and its effect on distance runners as possible.

Regardless of whether a team has the benefits of altitude for training or not, it is advisable for all athletes competing at altitude to run as economical a race as possible when competing at altitude. The rub comes in when the team or athletes who have trained at altitude try to make you "play their game" by running

fast-slow, to build up your "oxygen debt" and get you or your team to succumb to the perils of altitude. The knowledgeable coach, who has had little or no experience at altitude preparation will learn all he can about it so that he can do everything in his power to prepare his athletes for the altitude experience and then hope for the best. Let's face it, the team who is located at sea level or low altitude and must compete at altitude is at a distinct disadvantage. Do everything you can to prepare your "sea level" team and hope for the best.

C h a p t e r XII

RUNNING FORM MECHANICS

We seldom see a top runner on any level who has poor running mechanics. However, there have been exceptions. Emil Zatopek, the great Czech athlete, ran with very unconventional form but was the best runner in his time, winning three gold medals in the Olympic Games. One of the main reasons that he was so outstanding was because he was the forerunner of twice a day workouts. He also ran very demanding interval workouts, such as 20 x 200 meters with a 200 meter recovering followed by 10 x 400 meters with a 200 meter recovery, followed by 20 x 200 meters with a 200 meter recovery.

Coaches owe it to their runners to try and correct their form as soon as possible, allowing them to achieve as much success as their ability and desire will permit them.

When I think of good running mechanics, the first thing I consider is good rhythm. Rhythm is the coordinated movement between the arms and legs. The arm action dictates to a great extent what the legs do. For example, if the athlete uses a short stroke with the arms then the runner will exhibit a short stride. Rhythm also involves the "law of opposition" between the arms and legs. In other words when the runner puts his left

leg forward, the runner's right arm should be forward to provide balance for the runner.

In considering running mechanics we must also consider the position of the upper torso. When running on the flat surface of a track, the upper body should be fairly erect. The head should be in alignment with the rest of the trunk. The arms should be swinging in a relaxed rhythm slightly across the body. The shoulders should be relaxed. Toward the end of the race the athlete should make an effort to "cut down" his arm action for the sprint to the tape. The reason for shortening the arm stroke is for better control of the stride and faster motion, and hopefully a faster finish. Remember the leg action is dictated by the arm action.

The placement of the foot is another area that must be considered when speaking of running mechanics. When running on flat surfaces, it is my belief that the foot should hit rather flat-footed with the weight evenly distributed. The weight will be a little more forward so that the athlete is not back on his heels. The reason that I believe the foot placement should be fairly flat is because

1. Running on the toes is much too fatiguing for the whole race and many times causes injuries for those who try it.

2. If the weight is too far back then the center of gravity will be working against the athlete moving ahead at a good rate of speed.
3. With the weight fairly evenly distributed over the whole foot one is less likely to stress or strain any one part of the leg or foot.

Uphill Running

Confidence, is one of the most important factors to consider when running on any terrain--and hills are no exception. For an athlete to feel confident and prepared to run a hilly course he must be trained and coached. Hill running puts added stress on the legs and arms. Therefore, hill running must be a regular part of training to properly prepare the body to run hills efficiently.

As in any form of running, it is of the utmost importance to stay relaxed and maintain cadence or rhythm. The steeper the hill the more the person should "lean from the waist" or keep his weight forward. It is advisable to stay off the heels. Keep the weight forward by staying on the "balls" of the feet. The eyes should be focused about five to seven feet in front of the runner. The stride should be shorter, thereby keeping the legs more in line underneath the body. The arm action should be shorter enabling the athlete to have better control when fatigue starts to set in during the later stages of the race. One last

comment regarding uphill running. A runner should seldom pass other runners going uphill unless the other runners are really struggling. Running uphill is working against gravity and it takes a lot more energy to run hard uphill than on flat terrain. Therefore, if you are passing numerous runners on a hill and they are maintaining a good pace, you are probably paying too great a price for the advantage you gain, and it will take its toll later in the race.

Another good technique to employ in uphill running is a "burst at the top." This is a good way of breaking another runner or group of runners. It takes a lot of practice to develop not only the strength but the mental toughness necessary for this tactic. As I have advocated in hill running, one should usually maintain his pace and form going up a hill, but as one approaches the top if he can learn to accelerate right at the top of the hill and continue this for 30-40 yards. This usually takes the heart out of most runners and it can break the race open. One word of caution, however, don't do this merely for the sake of doing it. Make sure that you can keep the margin that you have earned on this technique or it is wasted energy.

Downhill Running

One of the most important considerations here is to stay relaxed. The runner should attempt to let himself go downhill.



Members of the top 15 runners at the 5 mile mark during the NCAA meet at Penn State demonstrate downhill running

He should let the downhill carry him down with the least amount of effort expended. Again as in uphill running, the athlete keeps a short to medium stride. If one goes too fast he will beat his legs to death and pay a greater price later for expending too much energy going downhill. It is a fine line between utilizing the downhill to best advantage and going too fast and "beating the life" right out of the legs and not be able to keep pace later. Two keys to help guide you in running downhill are:

1. If you are running by everybody going downhill, then you are probably going too fast unless everyone is running the hill completely wrong. This is possible, but not probable.
2. If you are moving very well and you feel like a runaway vehicle, then you are probably running too fast down the hill.

When you want to slow down a little going downhill, you merely "pull back on the reins" by straightening the upper body a little toward the way you have just come. Conversely the way to speed up is just lean a little more into the downhill.

As in every other area of running, there is a fine line as to what is optimal and what is too fast. One can only learn these things by trial and error in practice.

Transition - Pace to Finish Sprint

The reason many distance runners are unable to finish fast or at least decelerate less than other runners at the finish is

that they have not been drilled on the mechanical changes of form necessary in sprinting.

During the main body of a distance race, the distance runner is mainly concerned with keeping contact with the leaders of the race, or at least the "leading pack." The form considerations during this part of the race are erect upper body, observing the law of opposition between arms and legs, and good arm action (rhythm).

After the athlete has gotten into fairly good shape, the knowledgeable coach will drill his team on finishing mechanics. To begin with I would suggest that the coach incorporate some sprint drills into the early portion of the workout, before the athlete is too fatigued. In this way the athlete will be better able to learn the "change of form" and later be able to carry it over in an actual race when he is fatigued. But the only way to teach a runner to finish properly is through many repetitions of "correct" sprint form work.

The logical question then, is what is good sprinting form at the end of the race, and how does one make this transition?

As I mentioned earlier, the distance runner is mainly concerned with maintaining contact with the "up-front group," and doing it as easily as possible without expending too much energy too early in the race. The runner should be as smooth as possible with a medium arm carriage and exhibit the law of opposition.

As the runner approaches the point where he wishes to break open the race with a "pick up" or sprint, he must drive his arms at a "lesser" angle than during the pace stage of the race. He must attempt to get his weight forward by getting up on his toes. He must strive for "higher knee" lift.

But remember this is not as easy as it sounds. At the end of the race when fatigue has set in it is as much a "mental" thing as "physical." A distance runner must be tough in mind as well as body. This is something a coach can't give an athlete, but he can help develop what the athlete was given by nature.

A good drill to work on this is "Indian file." The coach gets groups of 10-12 runners in a single file line and on a command the last runner sprints by the group until he becomes the leader. If this is repeated for 20-30 minutes it can be quite fatiguing and can teach the things we want to teach in sprinting at the end of a race.



Washington State displays the importance of group running as they move by Craig Virgin, formerly of Illinois

Chapter XIII

INJURIES MOST COMMON TO DISTANCE RUNNERS

When a runner suffers an injury it can be a very frustrating experience to the athlete, as well as the coach. For a runner to be successful he must attain a certain level of "mental" and "physical" toughness. But when it comes to injuries, this is an area where these qualities may prove detrimental.

I prefer my runners to use the whirlpool whenever they have developed a soreness after any particular workout. We want our runners to report to us the first day they feel any real soreness, even if it is just early season woes. After the early season soreness we become suspicious of anything that lingers. If the whirlpool does not eliminate the soreness, then we have one of our coaches take the athlete to the trainer who will then prescribe a special treatment. We demand that an athlete see the trainer as frequently as the trainer prescribes. If the athlete does not follow the trainer's instructions, it can mean missed days of practice, lost time and perhaps the difference between being the champion and an "also ran." If after a reasonable time the injury does not clear up, we will then take the athlete to the doctor.

Many high schools are not fortunate enough to have a full-time trainer. This can make the situation more difficult. My advice to those of you in this situation is to get the athlete to someone who is medically qualified as soon as possible.

Some of the more common injuries and their probable causes are as follows:

1. Sore Knees - When a young runner starts putting in too many miles too early in the conditioning period, the knees are one of the first areas to get sore. If the athlete does not have a good pair of shoes, then the knees tend to absorb too much of the shock. The training shoes should have a good "arch support", as well as a good thick well cushioned sole.
2. Pulled or Strained Muscle in Leg - This can be caused by doing too much, too soon. It also could be caused by up or downhill running, or by speed work too early in the conditioning period. Remember that one of the best ways to avoid injuries is to gradually adjust the body to the "stresses" of training. Do not drop your intervals 5 or more seconds in a one or two week period of time. Don't start hard hill training all at once. Gradually work into it. I would not recommend dropping the team to interval work until you have run a given pace for 3-4 weeks.

3. Blisters - These are usually from trying to break-in a new pair of shoes too quickly. One way to avoid a lot of blisters is by using nylon top shoes. Another way blisters can develop is by the athlete using poorly fitted shoes. When selecting shoes, make sure they are not too tight so they "bind", or too big so that they slip and slide. If one of your athletes is in the process of breaking in a new pair of shoes, encourage them to put a light coat of vaseline on the "blister prone" areas before running. This will cut down on the amount of friction. Shoes that do not fit properly will cause blisters even after the shoe has been broken in, so one of the keys is to get a proper fit on your training shoe in the beginning.
4. Stress Fracture - Many times a young or seasoned runner will complain of soreness in the foot or leg. We naturally assume that it may be a "bruise" or "strain" in the foot, or we may think that it is a "shin splint", if it is in the front of the leg. When the pain does not subside after a reasonable period of time, (1 week to 10 days) the coach should have the athlete's sore area x-rayed. At this point I want to cite an example that I have encountered that makes me very suspicious

anytime any of my runners complain over a period of time about any soreness in the lower leg or foot area.

My first experience with stress fractures occurred when I was coaching at Pasadena City College. One of the freshman runners had twisted his leg in a race on Saturday and had complained about it following the race. He soaked it in the whirlpool and we made arrangements for him to see the trainer on Sunday. Monday when I saw him at practice it was still bothering him, so I told him to run "easy" on the grass and see the trainer. The soreness persisted for about 10 days so we had the lower leg x-rayed. The x-ray showed nothing so the doctor said it was alright to run. I instructed the young man to run easy on the grass but, to run a few more miles. To better understand the situation I feel that I should point out a couple of things about the athlete. Number one, he had been a top high school 2 miler. Number two, he had achieved his success through very hard work, so he found it extremely difficult to lay off. Later I found out that he had run 20 miles on Sunday after complaining the day before of a very sore leg. After another 10 days of no improvement, I took the young man to another

doctor and he took another x-ray. This time they found some calcification and a hairline break across the bone in the front of the lower leg. We must understand that a doctor can miss a "stress fracture" the first time and if soreness persists, it is still a possibility. Sometimes the fracture does not break completely across the bone. Sometimes the bone will heal without the runner "laying off." After the bone heals there is an enlargement of the bone where it has "calcified." You can sometimes feel a lump on the leg where it was broken. But the coach should adhere to a policy of "easing off" the training program whenever an athlete complains of soreness to make sure it is nothing serious. In the long run this type of approach will save many missed days of practice and meets.

Chapter XIV

PROPER DIET FOR RUNNERS

As in other areas relating to athletics, the thinking has changed a great deal over the last 10-15 years in regards to what constitutes a proper diet for an athlete.

The athlete needs to eat a greater number of calories than one leading a more sedentary life. The thinking of many coaches today is let the athlete eat what he likes as long as he eats a balanced diet. In many situations, even in college, the athlete eats in a cafeteria type setting with the rest of the student body. Therefore, there are no special arrangements made for "the athlete", and what he is to eat. The trend is to let all students eat all they want as long as they clean up their plates.

When travelling to a meet, we sometimes have "team meals" where everybody eats together, but everyone selects their own menu. In observing my athletes over the years it is amazing to me how well balanced their meals are when leaving the selection up to them. We try to make our athletes aware of the latest trends in all areas of athletics, and many times will discuss the new ideas. In reference to diets several of our runners eat high carbohydrate type things, such as pancakes or spaghetti as their pre-meet meal. Others, however, will eat what they normally do.

I think a good story to keep in mind when considering the diet is as follows. When I was coaching high school, I took a young Mexican-American athlete to the high school state meet. The night before the meet I told him that he should eat a steak. That night he had trouble sleeping because of an "upset" stomach. The next day he ran almost last in the mile. He should have placed. But, he was not used to eating steak. This is but one reason why I believe that it is best for the young men to eat what they are accustomed to eating, as long as it is a balanced meal.

C h a p t e r XV

EQUIPMENT

One of the real advantages to a sport like cross country is that it can be very inexpensive. In a warm weather climate, a comfortable pair of trunks or shorts is all you need if you can find a grassy park in which to train. Many runners love to run barefooted on nice grassy surfaces.

If one is not fortunate enough to live in an area where the climate is warm, a cross country uniform or "warm-up suit" is needed. One would need a shirt, shorts, jock, shoes, and a sweat suit. In extremely cold weather areas, a hat and mittens and perhaps a face mask may be needed. The total cost for a complete cross country uniform generally runs about \$50.

Probably the most important part of cross country gear are the shoes. There are currently many fine shoes on the market designed specifically for running. There are special factors to consider when you select your training shoes for cross country. One of the most important things to look for in training shoes is a good sole and a heel that is elevated. If you have a good thick sole, the knees and legs will not have to absorb the shock of running on hard surfaces. The sole will absorb the shock and save much wear and tear on the feet and legs and thereby, prevent numerous injuries.

The reason for wanting an elevated heel is to eliminate some of the stretch on the Achilles tendon. The Achilles tendon runs down the back of the leg to the heel. It is one part of the anatomy that heals slowly once it is injured. Since the circulation is bad in this area, it is difficult to rehabilitate in a short time. For this reason, try to prevent injuries to this area through the use of good elevated heels on the training shoe.

Another important consideration in the selection of a training shoe is the material of the shoe. Try to get soft material, especially if you are "blister prone." Nylon is good material because a runner can go out on a long run in a new pair of shoes and usually not pick up any blisters. This would not be true for running in a new pair of leather top training shoes. If the runner purchases a pair of leather top shoes, he should gradually break them in for a period of several weeks. The athlete should wear the shoes around campus for a couple of days to break in the leather. After the shoes become more "flexible", the athlete can wear them for a couple of miles of easy running. The athlete might wear them for only the warm-up for a week or so. Then he should try them on during "easy" workouts. Gradually he can use them a little more each day until they can be used exclusively.

When selecting a pair of shoes for competition, one of the prime considerations should be weight. Many times on a grassy course that is up and down, track shoes with short spikes are

used. Many runners, however, do not care to run in spikes and so they prefer a flat cross country shoe. Again nylon is a good material to look for in a racing shoe. Runners should also attempt to get a lighter pair of shoes than those which are used in training. The sole should be such that it will protect the wearer from getting any stone bruises during a race.

When a person is selecting a sweat suit for training, he should pick a well-fitted suit if he plans to do the majority of his training in the suit.

If the athlete lives in a fairly warm climate area, then he could get by with an inexpensive pair of "grays" that he would just use for "warming up" and "cooling off." The difference in price between a good pair of warm-ups made of nylon and a cotton pair can be as much as \$40. A windbreaker with a "hood" is another piece of equipment the prospective runner should contemplate purchasing, especially if he lives in a fairly rainy climate. Some athletes prefer to use socks, others do not. If they are preferred, then they should be white. I personally do not recommend them because many times they can wrinkle and cause blisters.

C h a p t e r XVI

"A LITTLE BIT ABOUT THE SPORT"

One of the attractive things about cross country as a team sport is that there is no limit to the number who can compete. In football only eleven men can play at a given time. In basketball, five men can play. But in cross country, everyone gets to compete on some level.

Cross country is a very big sport in the state of California. It is not uncommon to have over 100 runners out for a team. In Junior College, the numbers lessen because the race is longer (four miles) and the contestants have become more skilled than in high school.

During my first year in Junior College coaching we had seven men out for the team and one of them was ineligible. However, they were the best team in the school's history, finishing second in the conference, fourth in the Southern California area, and seventh in the state meet. They were a tough, dedicated group and all of them went on to four-year schools on scholarships.

Sometimes cross country is merely a preparation for track. But, there are many young men who love to run farther than they can in track and enjoy the freedom of the wide open spaces that

cross country affords them. It is for these young men that we have the "hill and dale" type of race that is quite different from the eight or twelve laps around a track. Not only is cross country different from many of the other team sports in the number of athletes that may compete but, oddly enough, the team with the lowest score is the winner.

In a high school varsity race each team usually has seven to 10 runners. The top five finishers on each team score. The remaining men on the squad attempt to beat one of the opponent's top five scorers, thereby making their overall scoring total higher. If one team can take 1-2-3, then they cannot be beaten in a dual meet where there are seven men on a team.

In a large invitational meet it is extremely important to have five strong runners. Often you'll hear coaches say that a cross country team is only as good as its fifth man. However, there are several types of successful teams. The most solid type of cross country team is the team that has five or more runners with good track credentials who also like cross country and can adapt to hilly terrain. Another type of team that can be quite successful is the team that has five good but not great runners who can finish within 15 to 25 seconds of each other.

The team that is going to win the big meets is usually the one that has one or two really outstanding runners who can consistently place in the top three places in any type of competition.

The remaining teammates or scorers are less than one minute behind them.

A team will seldom be successful if its members are not a close knit group. It is my belief that it is much easier for a runner to quit or slow down in a race if he does not really care for his teammates. If he likes them and they are good friends, he will think twice about letting them down. This type of relationship does not just happen. The coach must structure the social situations to help develop this "esprit de corps" on the team. The coach must also establish a good rapport with each team member. It is important for him to set the example as a stable and dependable individual on which others can count on in a tough situation.

Chapter XVII

OFF-SEASON TRAINING

Between Cross Country and Track Season

We complete our cross country season right at Thanksgiving time. From the end of cross country until the start of the second semester, we bulk up our training, mainly concerning ourselves with strength work.

In our weight training program we are mainly concerned with upper body development because we feel running develops the legs. On upper body work we have the athlete experiment with the maximum weight he can lift on one repetition of a given exercise. We then take 70 per cent of the maximum weight and do 12-15 repetitions with 2 sets of each exercise. An example would be, the athlete who can lift 100 pounds maximum on the bench press would use 70 per cent of 100 which would be 70 pounds. Once he can handle that, he should add 10 pounds. We want to make sure that the athlete performs each exercise properly through a full-range of movement so that it is building strength in the muscle groups that we are concerned with. Remember the tired legs will not lift at the end of the race unless the arms are strong enough to initiate the lift.

Here is a typical between seasons program for our 1/2 milers, milers, 3 milers, and 6 milers. (Our steeplechasers are on a little different program).

- Monday 1. Regular warm-up - jog 1 mile - stretch - jog #2 mile - stretch, 4 and 4 x 110.
 2. 1 hour of hill running on Coronado Golf Course or along scenic drive. (These runs are at about 4700-5000 feet altitude)
 3. Shake out - 1 mile
- Tuesday 1. Regular warm-up
 2. 30-40 minutes easy
 3. Weight workout
 4. Shake out
- Wednesday 1. Regular warm-up
 2. Road run 10-12 miles - 6-6:30 per mile
 3. Shake out - 1 mile
- Thursday 1. Regular warm-up
 2. 30-40 minutes easy
 3. Weight workout
 4. Shake out
- Friday 1. Regular warm-up
 2. 1 hour fartlek - jog - stride - jog pattern on grass in park
 3. Shake out
- Saturday 1. Regular warm-up
 2. 30-40 easy
 3. Shake out
- Sunday 1. 12-15 mile road run
 6:30-7:00 pace

Summer Training

Our track season runs from the first of February to the first weekend in June. Upon completing the Outdoor track season many of the runners are mentally, as well as physically tired, and we let them take several weeks of "active rest" or for some, maybe a week or two of no workouts and relaxation.

As soon as the men feel like starting again, probably in late June, or early July, they start on their long slow running again. They will run only once per day. They will probably get about 50-65 miles per week in at this stage. They will also incorporate some weight training on an every other day basis.

In August the mileage will be increased to 75 or 85 and maybe as high as 100. During the last couple of weeks in August the athletes start their morning workouts. In the morning run they merely run 3-5 miles easy. The advantages of an AM run are as follows:

1. It helps rid the body of some of the lactic acid that was accumulated during the PM workout the previous day.
2. It adds miles to their weekly total, and I think we all agree that excellence in running is highly correlated with the miles an athlete puts in over a given period of time.
3. The third and maybe the most important reason is that when an athlete gets up at 6-7 AM out of a warm bed to go out to

run, it has a toughening effect on the individual, both "physically" and "psychologically."

By the end of August we are ready to start school and we workout from 3:00-5:30 PM Monday through Saturday, with the athletes running on their own on Sunday.

Chapter XVIII

TIPS FROM THE CHAMPS

This chapter has been compiled through the cooperation of many of the top distance runners on the collegiate scene.

Every runner whose training program appears here has been All-American at least on one occasion. As you can see from the many varied programs, there are many paths to success. Get to know yourself and your athletes, then select the program that best meets your needs. Never falter for long--have faith. Success in distance running does not come overnight. Some athletes do not reach their potential until they leave school, so hang in there.



The powerful Miners of UTEP getting ready for the start of the 1976 NCAA championships at Denton.

Name: Ron Addison Height: 5'9" Weight: 128 lbs.

High School or Secondary School attended: J. F. Rhodes High School, Cleveland, Ohio.

Best Marks in High School in the following: 880 - 1:54.3;
Mile - 4:05.9; 2 Mile - 9:06.8.

High School Coach: James Zickes

What made you successful in High School. What ideas would you recommend to young aspiring runners just starting:

"Proper workouts and self confidence helped me. I knew I could be good. I trained hard in high school, but didn't over-train. I rested some in the summer and didn't kill myself during the season. I had a smart coach."

Best College Marks: 880 - 1:53; Mile - 4:04.3; 3 Mile - 13:21;
6 Mile - 28:03; steeplechase - 8:29.6.

College Coach: Stan Huntsman

Tips for college runners wanting to achieve success: "Don't get hurt, injured or sick. As soon as you feel something coming on, rest and don't abuse the injury. Get medical attention quickly from a doctor familiar with runners. If possible see more than one doctor and get another opinion. I have found a lot of times doctors are not familiar with injuries sustained by runners. If injured and can't run, do a lot of swimming. It helps you keep

(Ron Addison - continued)

in fair shape and gives you something to do. You won't feel like your wasting time if you swim."

High School Workouts:

Sunday -10 mile medium to hard.

Monday -2 mile jog. Stretch and stride.

6 x 1 mile (440 flat, 440 up, 440 down,
440 flat) 6 minute pace, 3 minute rest.
Jog down 1 mile.

Tuesday -2 mile jog. Stretch and stride.

8 x 880 on grass in 2:30, 3 minute rest.

1 mile jog down (after October 1st race
on Tuesday)

Wednesday-8-10 mile run medium to hard.

Thursday -Warm-up

8 x 440 on grass in 63-65. 3 minute rest.

Friday -5-6 mile run. Stretch extra good and strides.

Saturday -Race

College Workouts:

Sunday -10-12 mile run medium pace.

Monday -10 miles hard (50-52 minutes).

Tuesday -2-4 mile warm-up.

1 x 1 mile on very hilly and tough course

1 x 2 mile on cross country course

1 x 1 mile at maximum effort.
2 minute rest intervals.

(Ron Addison - continued)

Wednesday -8-10 mile run easy pace.

Thursday -3 x 1 mile on flat dirt road
(4:30-4:40 pace with 2 minute rest while
jogging)

Friday -5-6 mile run.

Saturday -Race

(Also: 4-5 miles at 6:30 AM. Our whole team runs
morning runs together.)

Name: Paul R. Cummings Height: 5'10" Weight: 138 lbs

High School or Secondary School attended: Ernest Righetti,
Santa Maria, CA 93454

Best marks in High School in the following: 880 - 1:54;
Mile - 4:10; 2 Mile - 9:28.

High School Coach: Dick Ballou

Typical training week during Cross Country in High School:

"Running in AM 2-3 x per week, 3-4 miles. In PM long runs with "fartlek" two times per week. I covered 40-45 miles per week."

What made you successful in High School? What ideas would you recommend to young aspiring runners just starting?

"Try and figure out what both your body and mind can handle and then push yourself to that limit. Don't try and do too much, but build for the coming years."

Best College marks: 440 - 49.5; 880 - 1:50.4; Mile - 3:56.4;
2 Mile - 8:29.6; 3 Mile - 13:53.8 (altitude); 6 Mile - 29:02 (X-Country).

College Coach: Shevald James

Typical week's training in college during Cross Country season: "AM 7 miles 6 times per week, PM 7-13 miles 6 times per week, with approximately one of those workouts on the track, one up hills, and one "fartlek" type.

(Paul R. Cummings - continued)

The rest of the running was done at 6:00-6:30 per mile pace."

Tips for college runners wanting to achieve success:

"Theoretically, a distance runner doesn't reach his peak until about age 27, so the college years should still be building ones. If possible, try to look more to the future when training."

Name: Rodolfo Gomez Height: 1.73 mts Weight: 57 kg.

High School or Secondary School attended: Sec. Del Majisterio No. 16 CD. Delicias Chih.

Best marks in High School in the following: 880 - 2:02;

Mile - 4:24; 2 Mile - 9:47; 3 Mile - 15:34

High School Coach: "I didn't have a coach."

Typical Training week during Cross Country in High School:

"I ran 3 times a week, but we didn't have cross country competition."

What made you successful in High School? What ideas would you recommend to young aspiring runners just starting?

"To train hard, but with intelligence. Plus, don't make your workouts into a competition."

Best college marks: 440 - :52; 880 - 1:52; Mile - 4:01;

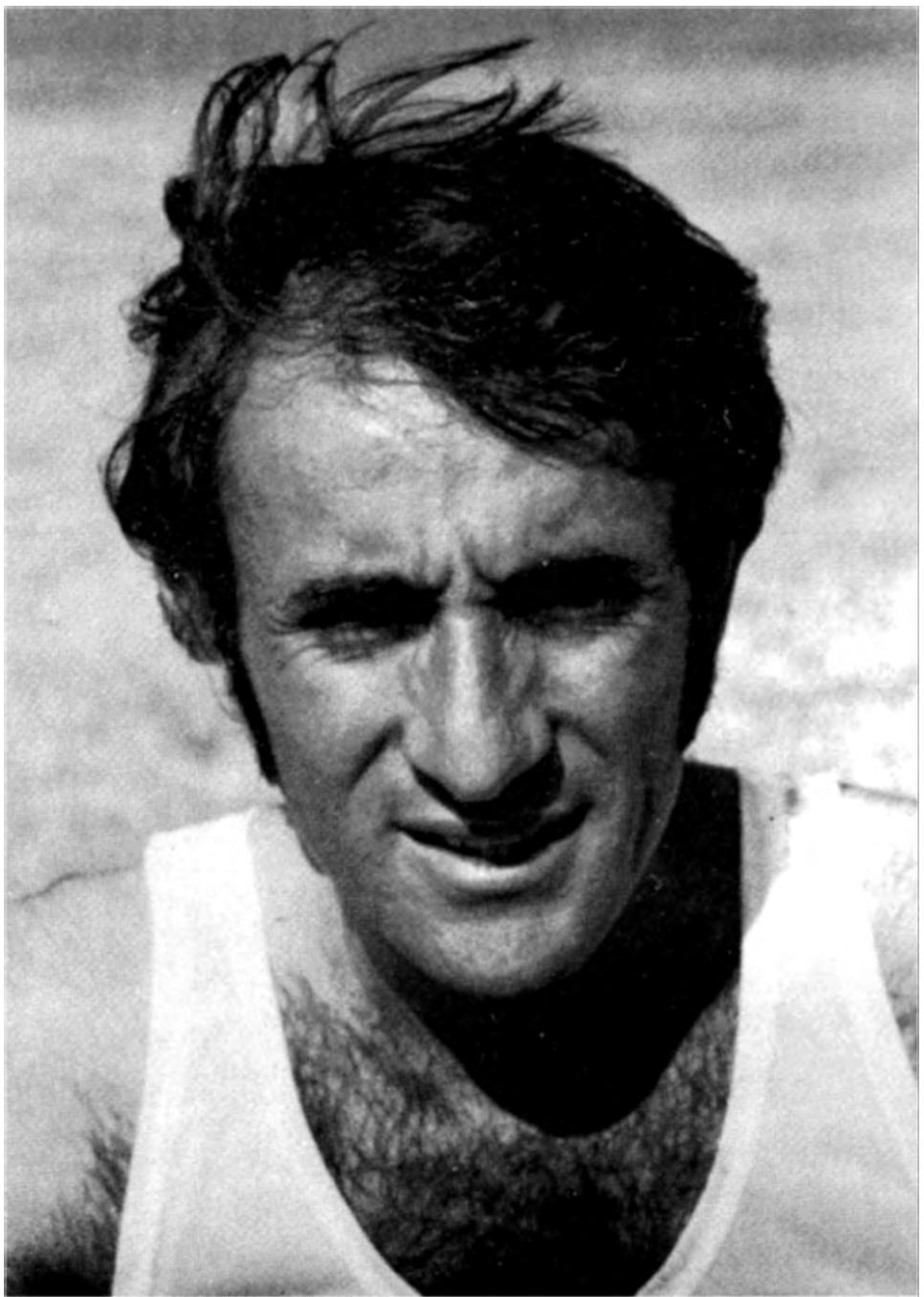
3 Mile - 13:02; 10,000 meters - 28:08.

College Coach: Ted Banks

Typical weeks' training in college during Cross Country season:

M-Long distance(med) T-Long distance(easy), W-Intervals (hard), T-Long distance(med), F-Long distance(easy) or pre-race, S-Interval(hard), if no competition. S-Long distance(med).

Tips for college runners wanting to achieve success: "I recommend high altitude training and a lot of long distance type training."



Rodolfo Gomez of UTEP

Name: Mark Johnson Height: 5'10" Weight: 135 lbs

High School or Secondary School attended: Mason City High School
Mason City, Iowa

Best Marks in High School in the following: 880 - 1:56.9;

Mile - 4:22.4; 2 Mile - 9:06.3; 6 Mile - 30:13.

High School Coach: Dave Long

Typical Training week during Cross Country in High School:

HIGH SCHOOL

Sunday	Monday	Tuesday	Wed.	Thurs.	Friday	Saturday
AM 5-6 Mile Run	4 Mile Run	4 Mile Run	4 Mile Run	Rest	Rest	Race
PM Rest					Easy Jogging	

"I began my afternoon workouts with a 12-15 minute run followed by such workouts as:

1. 3x1 mile, 2x880 or;
2. 4-5x880, 4-5x440 or;
3. 2x8 minutes, 2x4 minutes,
2x2 minutes, 2x1 minutes, or;
4. 3x5 minutes, 3x3 minutes,
3x1 minutes, or;
5. 5x3 minutes, 5x2 minutes,
5x1 minutes.

All workouts were followed by about a one mile jog down."

"I ran about 55-60 miles per week."

"I feel that it is important to be consistent. One should try and run every day. During the season it is helpful to run twice a day. By running twice a day, one can build up a competitive

(Mark Johnson - continued)

advantage (both physical and psychological) over other runners.

I would recommend doing push-ups and sit-ups, with weight training (to complement push-ups) if desired."

"The most important advice I would give a young runner is do not kill yourself off. It does not do yourself (or your teammates) any good to be injured all the time by training too hard."

"I feel that training the year round is also important. If one does not train all year, he wastes too much time trying to get into shape after the season starts. Therefore, he may not realize his potential."

Best College Marks: Mile - 4:05.7; 3 Mile - 13:26.8; Mile - 27:32.6; Steeplechase - 9:10; 1500 - 3:46.4; 2 Mile - 8:34.6; 10,000 - 28:25.2

College Coach: Dan McClimon

Typical weeks training in college during Cross Country Country season: (next page)

(Mark Johnson - continued)

COLLEGE							
Sunday	Monday	Tuesday	Wed.	Thurs.	Friday	Sat.	
AM 15-18 Mile Run (5:20 Pace)	7 Mile Run	10 Mile Run	7 Mile Run	Rest	Rest	Race	
PM Rest			(5:00 - 5:15 Pace)			Easy jogging over course	
		"Workouts are started and ended with an easy three mile run. I usually go hard one day followed by an easier day. An easy day is generally a moderately-paced road run or a few easy intervals. Typical hard workouts include: 1. 6.3 mile run around Lake Wingra or; 2. 4x2 miles on golf course or; 3. 3x3 miles in University Arboretum or; 4. 3x2.5 miles in University Arboretum or; 5. Alternating hard and easy 1320's (five of each, for a total of 10)."					

"I run about 105-120 miles per week."

"Running the year round and twice a day workouts are virtually mandatory when racing over distances as long as six miles. I still stress push-ups and weight training because the upper-body strength derived from these workouts comes in handy at the end of a race."

"Try to pick out a few races in which you would really like to run well, and then gear your training toward those races."

Name: Frank Munene Karuki Age: 20 Height: 5'9"

Best marks: 440 - 46.9; 880 - 1:48; Mile - 4:02; 6 Mile -
29:56 (cross country).

Honors in U.S., foreign soil: Names All-American; In the Fall
of 1974 - All-American in cross country - 15th place;
Spring 1975 - Named All-American at 1000 yds indoors -
4th position; Late Spring 1975 - All-American (NCAA Mile
Run).

Philosophy on workouts: "Try to have the finest workouts, but
only when the body feels ready to withstand it."

Do you do weight training exercises? "Only some weight training
for my legs during the summer of 1974, prior to the X-
country season. At present, I'm putting in more weight
training for my legs only."

How many cross country races do you run per year? "About 5 or 6."

How Many Indoor races per year? "3 or 4 races only."

How many meets during Outdoor season? "6 to 7 meets."

Sample workouts:

A. "Cross Country in early season - prefer some longer
distances (6 to 8 miles) with strides and at a medium
pace - 5 days in a week."

B. "During competition or late season, I like working
on the same distances at a fast pace and prefer
combining this with tough hills to improve endurance."

(Frank Munene Karuki - continued)

D. "Work seriously on track to attain or acquire fast speed--this covers two days in a week and the rest of the days I normally work on the hills or longer jogging."

Typical pre-race warm-up: "about 45 minute warm-up - 15 minute exercises."

What do you think has made you a successful runner? "Self discipline and much devotion to whatever I'm doing."

Any special tips for the young runner just starting his career?

1. "Always aim for the top, if you miss your shouldn't give up, but try harder!"
2. "Always think of yourself as being the best, but be ready to discipline yourself."



Frank Munene Karuki of Texas-El Paso

Name: Herb Lindsay Height: 5'9" Weight: 150 lbs

High School or Secondary School attended: Reed City High School, Reed City, Michigan

Best marks in High School in the following: 880 - 1:58; Mile - 4:22; 2 Mile - 9:22

High School Coach: Dale Clark

Typical training week during Cross Country in High School:

"Three repeated 3/4 - mile with warm-up/warm-down mile, long runs (5-8 miles) two or three days a week. Mainly slow intervals, distances varied from 440 to mile."

What made you successful in High School? What ideas would you recommend to young aspiring runners just starting? "The desire to be a champion, to be better at something than any of my brothers and friends. I was mainly self motivated, self-disciplined and self-coached. I looked forward to being helped through college with an athletic grant."

Best College marks: 440 - None; 880 - 1:54; Mile - 4:03; 3 Mile - 13:21; 2 Mile - 8:37; Steeplechase - 8:58.

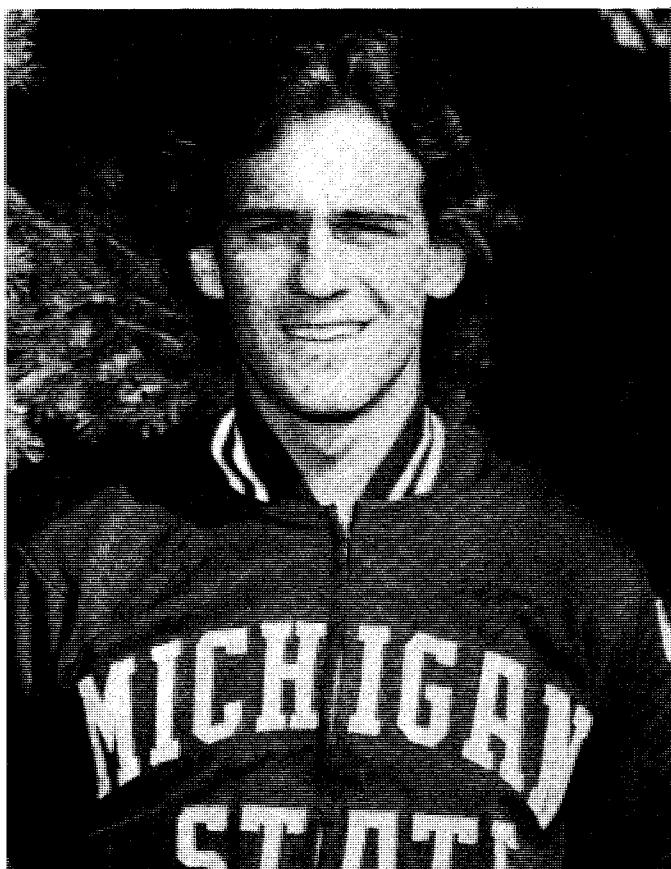
College Coach: Jim Gibbard, MSU

Typical week's training in college during Cross Country season:
"Sunday - Monday long runs quite hard (10-15 miles); Tuesday - Wednesday: interval training over 6-mile cross

(Herb Lindsay - continued)

country course (golf course); Thursday: eased down
fartlek; Friday - easy run with some fartlek; Saturday:
COMPETE."

Tips for college runners wanting to achieve success: "Run like
hell" I am a believer in interval training and suggest
they follow some type of interval training program. Also
be a goal-setter and know your direction. Have purpose
in your running."

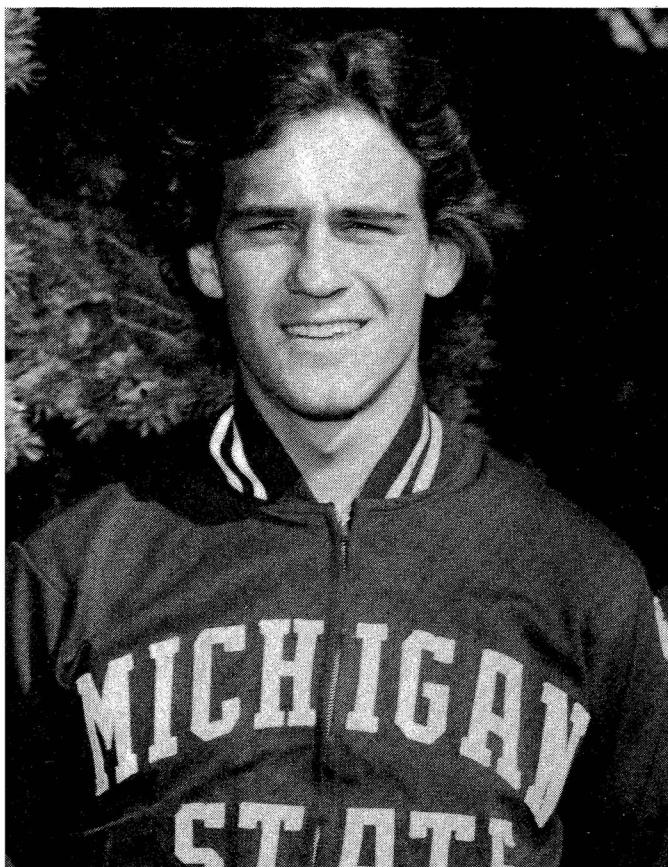


Former Michigan State great, Herb Lindsay

(Herb Lindsay - continued)

country course (golf course); Thursday: eased down
fartlek; Friday - easy run with some fartlek; Saturday:
COMPETE."

Tips for college runners wanting to achieve success: "Run like hell" I am a believer in interval training and suggest they follow some type of interval training program. Also be a goal-setter and know your direction. Have purpose in your running."



Former Michigan State great, Herb Lindsay

Name: David Brian Long Height: 6 ft Weight: 140 lbs

High School or Secondary School attended: Kingsleigh School,
Bournemouth, England

Best marks in High School in the following: 880 - 2:05; Mile -
4:42; 2 Mile - 9:50; 3 Mile - 15:26

High School Coach: NONE

Typical training week during Cross Country in High School:

"Sunday: 10 miles steady; Monday: 7 miles fartlek;

Tuesday: weights; Thursday: 4 miles steady. If I
trained at all, this would be one of my better weeks."

What made you successful in High School? What ideas would you
recommend to young aspiring runners just starting?

"I wasn't very successful. After graduating in 1971, I
started working and began to train a lot harder. The
more success I had, the more I trained. To young runners,
don't set your goals out of reach, otherwise success will
be hard at first."

Best College Marks: 440 - :52; 880 - 1:55.1; Mile - 4:07;
3 Mile - 13:30; 6 Mile - 29:05; Steeplechase - 8:50.2

College Coach: 2 years - Jerry Bean; When in England - Dave
Jennings; Now - Del Hessel.

Typical week's training in college during Cross Country season:

"Sunday: 15-20 miles steady. Monday: AM 7 miles steady,
PM 8x3 mins with 2 mins recovery. Tuesday: 7 miles AM,

(David Brian Long - continued)

PM 8x1/2 mile in 2:12, 2 mins recovery. Friday: 5 miles AM, PM 5 miles jogging. Saturday: race or hard run 10 miles. Total 100 per week."

Tips for college runners wanting to achieve success: "To be dedicated, if your training is good and consistent, you will race a lot better. Be confident at all times."



All American Dave Long of Western Kentucky

Name: Peter Lemashon Height: 5'9" Weight: 150 lbs

High School or Secondary School attended: Ololaisier Secondary School. Olkajiado District, Kenya.

Best marks in High School: 880 - 1:48; Mile - 4:15; 2 Mile - 9:35; 3 Mile - 15:40.

High School Coach: Mr. Peter Brabner (England)

Typical training week during Cross Country in High School:

"Since this was a day school and my home was 12 miles, it was always 24 miles daily. But on Tuesday and Thursday school cross-country."

What made you successful in High School? What ideas would you recommend to young aspiring runners just starting? "I was much interested so I succeeded. I would encourage the sports officials to put more emphasis on athletics."

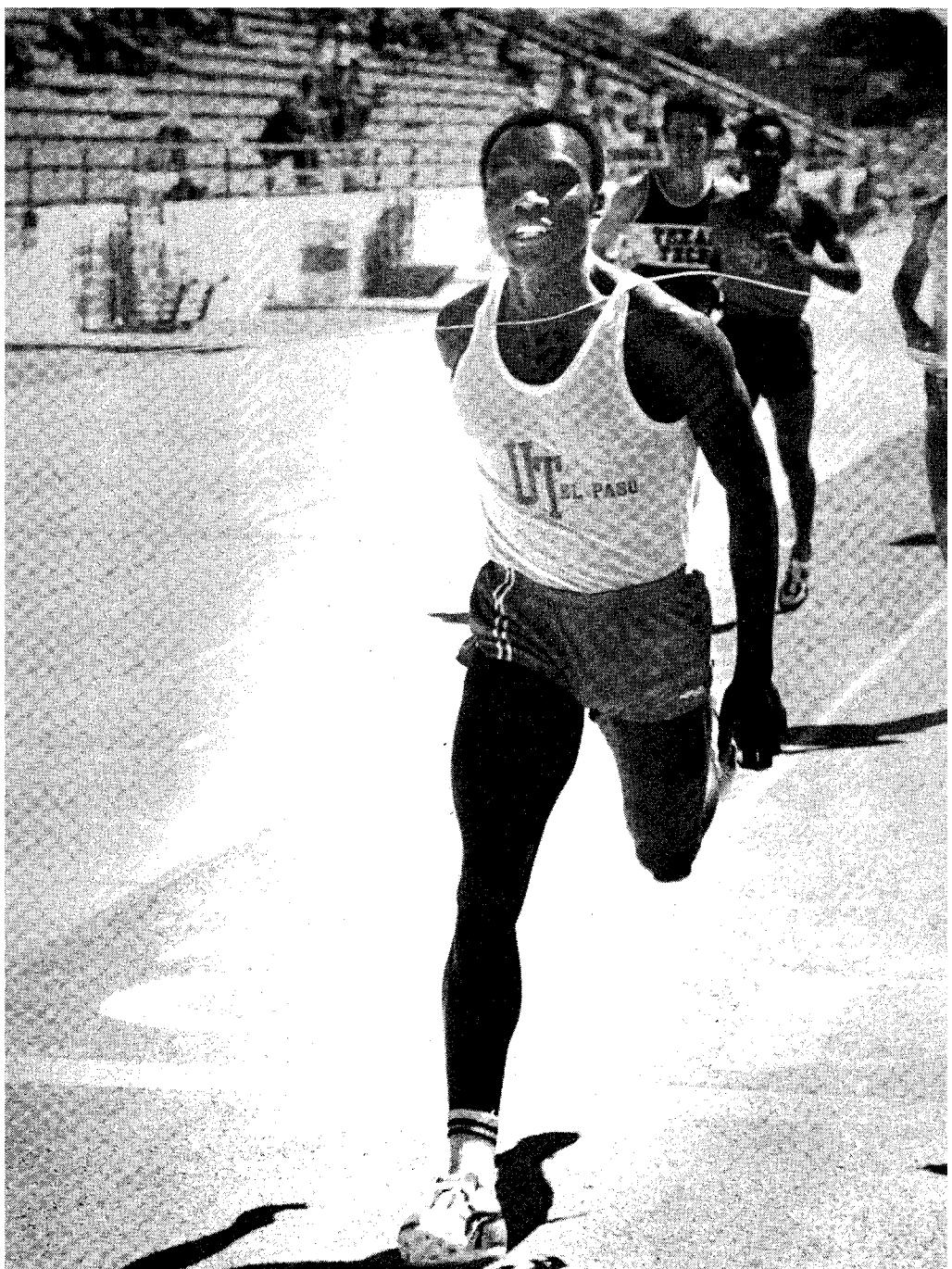
Best college marks: 440 - :47; 880 - 1:45.6; 6 Mile - 30:00.0.

College Coach: Ted Banks

Typical week's training in college during Cross Country season:

Early September meet minor competition before the major cross country meets come. This usually is done in the month of November before the indoor starts."

Tips for college runners wanting to achieve success: "The winners always achieve a trophy, medal, ring, or a certificate indicating that he has placed among the best. This is an incentive for runners."



1978 NCAA 800 meter champion, Peter Lemashon of UTEP

Name: George J. Malley Height: 5'11 1/2" Weight: 155 lbs

High School or Secondary School attended: DuVal High School,
Glenn Dale, MD.

Best Marks in High School in the following: Mile - 4:18.1;
2 Mile - 9:10.3

High School Coach: Robert Budd

Typical Training week during Cross Country in High School:

"Over 100 miles/week including a lot of slow 12 milers in parks. Six times 1.5 miles late in the season."

What made you successful in High School? What ideas would you recommend to young aspiring runners just starting: "I trained through competition and worked out very hard (8 x 440 in 59.6, 5 x 1 1/4 mile in 6:04). I would not recommend high school runners to train hard. They are too young. They should just build a sound base, otherwise we see the "California Syndrome" where runners never develop to the international or even the national level of competition."

Best College Marks: 880 - 1:54 Indoor; Mile - 4:04.3; 3 Mile - 13:31, (13:53.2 5K); 6 Mile - 28:26.6; Steeplechase - 8:30.4.

College Coach: Harry Groves

(George J. Malley - continued)

Typical week's training in college during Cross Country season:

"AM - 8-10 miles daily except Friday and Saturday during competition period. (Friday AM - 5-6 miles and Saturday AM - 1-2 miles.

	Monday	Tuesday	Wednesday	Thursday	Friday
PM	15 miles with fairly fast 5 mile in middle Weights: 10 reps going once around the Universal	3 miles 10x880 over X-C course or 15x440 on track (65-68 sec) or 4x1 1/2 on X-C course	10 miles	3 miles. 20 minutes easy of fartlek on grass I like this area with workout, it 110 at is easy on 5:30 pace the legs and and next hard on the 110 at lungs. I 6:00 pace always feel good the day after.	10 miles

"Saturday: race with 3-5 miles before and after the race."

"Sunday: 15 miles run easy or split session - 5 and 10 easy."

Tips for college runners wanting to achieve success: "Build a strong base. I feel the John Walker method of build-ups during the pre-season can be applied to the American Collegiate Schedule. Mileage of at least 140 per week during August, December, and March. Each runner, through experimentation, finds his own preferred racing mileage. Mine is between 90-95 miles per week.

Name: Sammy K. A. Maritim Height: 5'11" Weight: 140 lbs

High School or Secondary School attended: Kericho High School,
Kericho, Kenya

Best Marks in High School in the following: Mile - 4:30; 3 Mile -
15:00.

High School Coach: "I was coached by more than one person, but
most of all I depended on talking to good runners like
Kiprugut and Wilson."

Typical training week during Cross Country in High School:

"I trained three times a week only (Monday, Wednesday,
and Friday), covering the six miles required in the
competition. Never trained on Saturday and Sunday.
Vacations too were days which I didn't even attempt to
run."

What made you successful in High School? What ideas would you
recommend to young aspiring runners just starting:

"When I first competed in 6 miles at Hakuru during our
inter-district school's competition and finished second,
after a very short time of practice, I took an interest
in athletics, therefore I increased the speed of my runs
but trained the same number of days (3 days). All I
recommend is interest and self-discipline for aspiring
young athletes."



UTEP's Sammy Maritim (L) and Niall O'Shaunessey
of Arkansas minutes after the 1976 NCAA meet

(Sammy K. A. Maritim - continued)

Best College marks: 440 - :62 ; 3 Mile - 13:35; 6 Mile - 28:48;

College Coach: Ted Banks

Typical week's training in college during Cross Country season:

"Monday, Wednesday, and Friday were hard days, while Tuesday and Thursday were easy leaving Saturday as an optional when there is no competition. Sunday is a day that I cover about 18 miles easy."

Tips for college runners wanting to achieve success: "There is no shortcut to success in life. One has to strive and aim at a target in order to achieve success. Constant practice without too much strain, that might lead to an injury should be an athlete's daily routine."

"In conclusion, I owe my gratitudes to Ted Banks, who constantly watched my progress, giving me a lot of advice as to what to do when and at what time. He made me the athlete I am although I am not yet the best competitor among the world class athletes. With his continued coaching, I hope to be one of the top athletes in the future.

Name: Henry Marsh Height: 5'10" Weight: 160 lbs

High School or Secondary School attended: 10th grade - Corpus Christi King; 11th and 12th grade - Punahou School (Honolulu, Hawaii)

Best marks in High School in the following: 880 - 1:57.6; Mile - 4:18.5; 2 Mile - 9:38.

High School Coach: James Blackwood - 10th; Al Rowan - 11th-12th

Typical training week during Cross Country in High School:

"4-5 mile run every morning. Afternoons: distance runs, fartleks, and long intervals on the track. Sundays - rest. 50-60 miles a week."

What made you successful in High School? What ideas would you recommend to young aspiring runners just starting? "I believe that the biggest reason for my success was hard training with a lot of overdistance work. A high school athlete really can progress rapidly through overdistance."

Best college marks: 440 - :52; 880 - 1:56; Mile - 4:05; 3 Mile - 13:36; 6 Mile - 30:08 (Cross Country); Steeplechase - 8:23.99.

College Coach: Sherald James and Clarence Robison

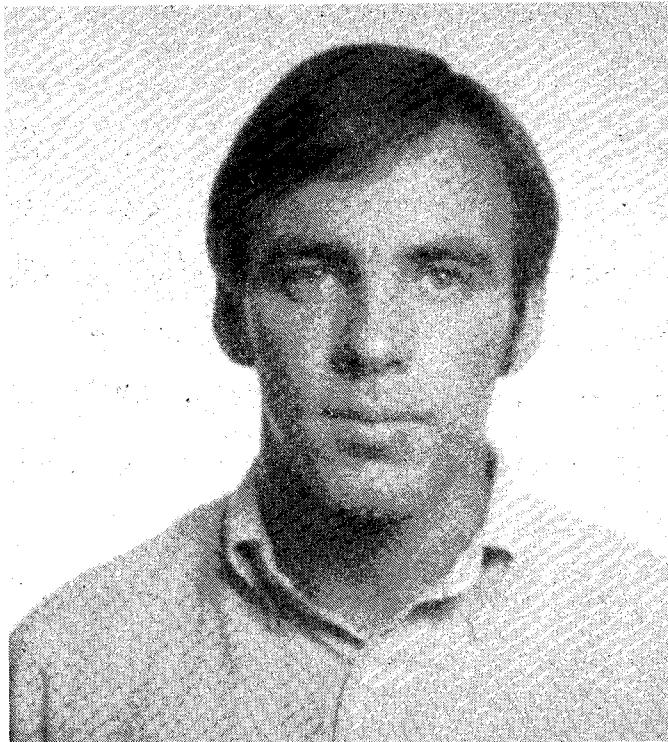
Typical week's training in college during Cross Country season:

"5-6 mile run every morning. Monday, Wednesday and Friday I ran intervals on the track (800's and repeat

(Henry Marsh - continued)

miles). Tuesday and Thursday I did hill work in the mountains. Saturday was a long run. Sunday I rested. Around 70 miles a week."

Tips for college runners wanting to achieve success: "The best advice I can give is run according to your individual needs. Don't maintain a strict program, but run according to how you feel. It's better to underwork than overwork in college."



Henry Marsh, American record-holder in the steeplechase

Name: Ed Mendoza Height: 5'6" Weight: 130 lbs

High School or Secondary School attended: Helix High School
(San Diego)

Best Marks in High School in the following: 440 - 56.0; 880 -
2:00.0; Mile - 4:15.5; 2 Mile - 9:00.1.

High School Coach: Michael Muirhead

Typical training week during Cross Country in High School:

"40 miles a week, with the intervals on Monday, Tuesday,
and Saturday. Road runs on Wednesday and races on
Friday. Rest on Thursday and Sunday."

What made you successful in High School? What ideas would you
recommend to young aspiring runners just starting:

"Even though my mileage was low, I was dedicated and ran
high quality interval, road-work, and races. Everything
was done well, and the "rest" days were essential.

Complete rest on those days. Consistency was the most
important ingredient, don't miss hard days."

Best College Marks: 440 - 54.0; 880 - 1:54.1; Mile - 4:03.1;
3 Mile - 13:28; 6 Mile - 27:29; 2 Mile - 8:33.2 (Indoors),
8:43 (Outdoors).

College Coach: Bob Larsen; Jr. College: Dave Murray, University.

Typical week's training in college during Cross Country season:

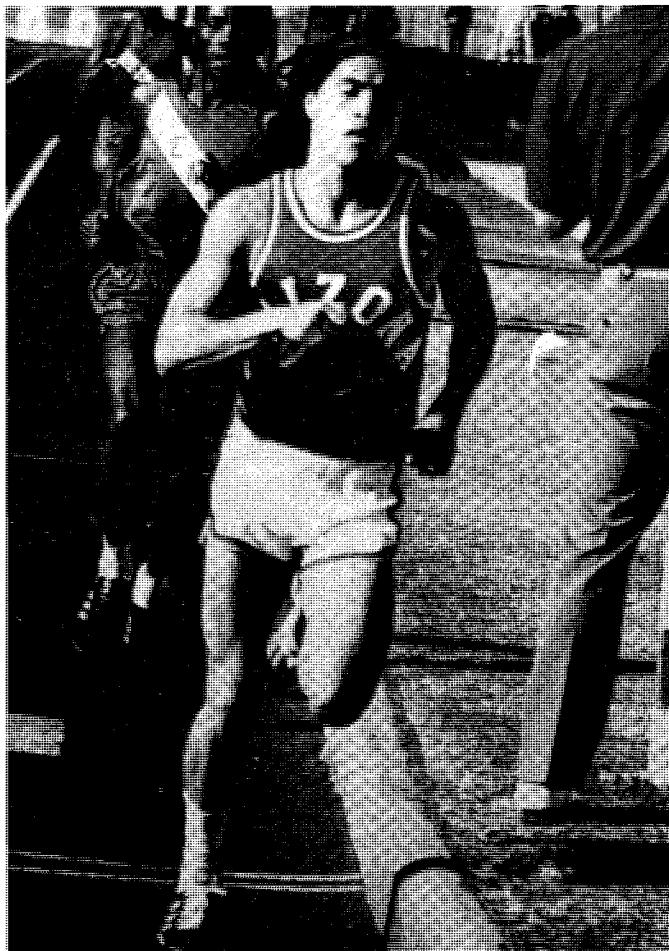
"70 miles a week in Jr. College, 80-90 miles a week in
College. Intervals twice a week, road work (8-10 miles)

(Ed Mendoza - continued)

four times a week--all relatively easy pace. Races or time trials once a week."

Tips for college runners wanting to achieve success:

"Consistency, don't skip days, the dividends will pay off in the long run. Don't over-train, 100 plus miles isn't always the answer--train, don't kill yourself. Do intervals and fartlek at (just a little faster) race pace."



Ed Mendoza of the University of Arizona

Name: James Munyala Height: 5'7" Weight: 145 lbs

High School or Secondary School attended: Nkubu High School,
Meku, Kenya

Best marks in High School in the following: 880 - 1:48; Mile -
4:04; 3 Mile - 14:00.

High School Coach: Myself

Typical training week during Cross Country in High School:

Six miles four times per week.

What made you successful in High School? What ideas would you
recommend to young aspiring runners just starting?

"After running, I used to go back and play football
(soccer) or volleyball. I competed in both of them.

Best college marks: 440 - :48; 1500 meter - 3:39; 5000 meter -
13:33; steeplechase - 8:21.

College Coach: Ted Banks

Typical week's training in college during Cross Country season:

"8 to 12 miles every day of week in early season. Mid-
season: Hills on Mondays. Ten miles easy on Tuesday
and Thursday. Speed on Wednesday and hard workout on
Friday."



James Munyala in the top 15 at the 1976 NCAA

Name: Michael Musyoki Height: 5'6" Weight: 135 lbs

High School or Secondary School attended: Thomeanau Seconday
School, Kilome, Machakos.

Best marks in High School in the following: 880 - 2:25;
Mile (1500 m) 3:55; 2 Mile - 9:45; 3 Mile - 14:49.

High School Coach: Father Denis Kennedy and Philip Musonju
(army officer)

Typical training week during Cross Country in High School:

8 miles cross country three times a week and 2 days speed
work on track. On Saturdays easy run and no running on
Sundays at all.

What made you successful in High School? What ideas would you
recommend to young aspiring runners just starting?

"I was encouraged by my teachers, Father John Kevin and
then Father Dennis Kennedy. This really helped me and
gave me my start."

Best college marks: 440 - 59 sec.; 880 - 2:14; Mile - 4:19;
3 Mile - 13:19; 6 Mile - 27:51.

College Coach: Ted Banks

Typical week's training in college during Cross Country season:
"I begin with distance training, then back to the track
for speed work with the help of the coach."

(Michael Musyoki - continued)

Tips for college runners wanting to achieve success: "In order to achieve success you have to work hard and not get discouraged. One should know that it's very painful at the beginning, but at the end you will enjoy the fruits of your work."

Name: Lionel Ortega Height: 5'7" Weight: 132 lbs

High School or Secondary School attended: West Mesa High School,
Albuquerque, New Mexico.

Best Marks in High School in the following: 880 - 2:05; Mile -
4:28; 2 Mile - 9:46.

High School Coach: Louis Yannoni

Typical training week during Cross Country in High School:

"About 90-100 miles a week with no intervals almost all
distance and a little fartlek."

What made you successful in High School? What ideas would you
recommend to young aspiring runners just starting? "I
believe what success I achieved in High School was because
of my long distance training. Too many young runners are
afraid to run longer than six miles in practice. Long runs
will give you the strength needed to be successful."

Best College Marks: 440 - :55; 880 - 2:00; Mile - 4:10; 3 Mile -
13:33; 6 Mile - 28:16.

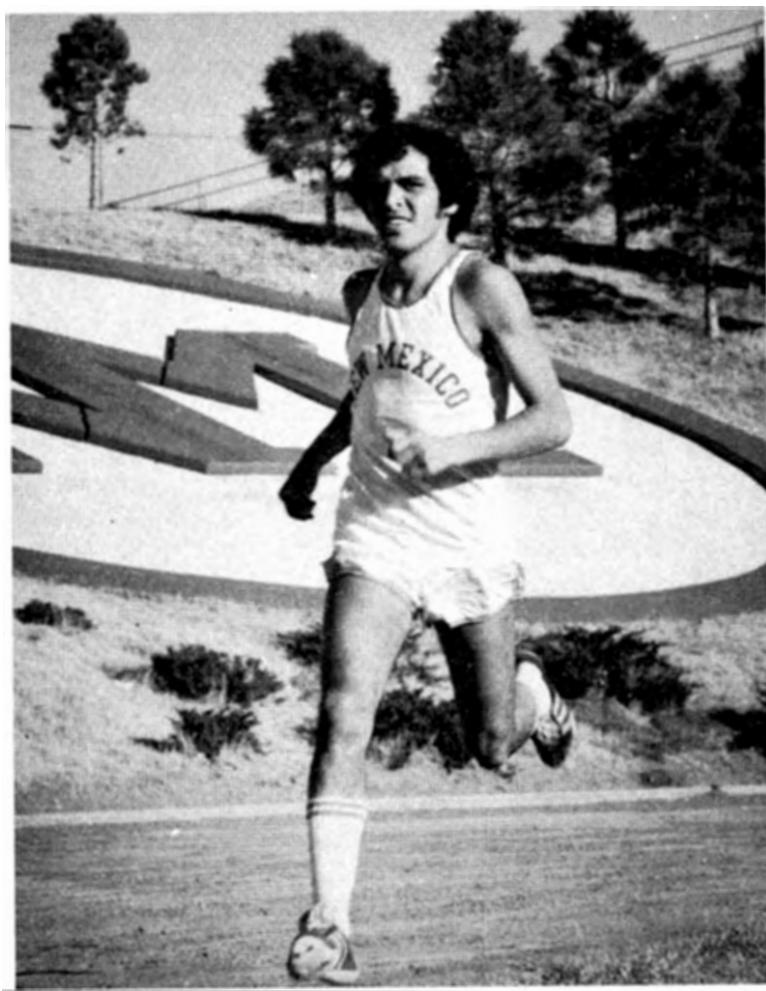
College Coach: Hugh Hackett

Typical week's training in College during Cross Country season:

"140-150 miles the weeks we do not have competition and
115-125 the weeks we have competition. Two days a week of
intervals in the afternoon."

(Lionel Ortega - continued)

Tips for college runners wanting to achieve success: "Many runners in college have the potential but do not have the desire. I believe the desire to workout and race hard is the only way a runner can be successful in the stiff competition of college racing."



Lionel Ortega of the University of New Mexico

Name: Arthur Redhair Height: 5'7" Weight: 130 lbs

High School attended: Snowflake High School

Best Marks in High School in the following: 880 - 1:59; Mile -
4:20.6; 2 Mile - 9:18.2.

High School Coach: Tot Workman

Typical training week during Cross Country in High School:

"Monday - 8 miles, Tuesday - 15, Wednesday - 5 miles and
12x440, Thursday - 12 miles, Friday - easy 5-7 miles,
Saturday - Race, Sunday - 20 miles."

What made you successful in High School? What ideas would you
recommend to young aspiring runners just starting?

"Train year round if you want to be a winner, but if you
lose take it, because losing is for everybody. If you
want to be a runner, you have to accept losing or
defeat."

Best College Marks: 440 - :50; 880 - 1:56.0; Mile - 4:10.1;
3 Mile - 13:31.4; 6 Mile - 28:41.0.

College Coach: George Young

Typical week's training in college during Cross Country season:

"We do about 9-12 miles every morning, except on Sunday
we go on an 18 mile run. Since it is a very hot climate
(114 degrees) during the fall, on Tuesday and Thursday
afternoons at 2:00 o'clock we run 7 miles."

(Arthur Redhair - continued)

Tips for college runners wanting to achieve success: "You don't have to take a loss so hard and be disappointed, have pride and faith in yourself. That's how winners are made."

Name: Chris Ridler

Height: 5'9" Weight: 140 lbs

High School or Secondary School attended: Henbury Comprehensive, Bristol, England.

Best marks in High School in the following: 880 - 1:55; Mile - 4:09

High School Coach: "None. Self coached."

Typical training week during Cross Country in High School: "I

just worked out 3 to 4 times a week. That was just steady running or speed-play, depending on how I felt."

What made you successful in High School? What ideas would you recommend to young aspiring runners just starting?

"Enjoying the sport made me successful in High School.

The main thing is for any young runner is to enjoy the sport, as so much dedication is required in the later years. I'd make sure they set realistic goals which can be obtained to make the success rate that much higher."

Best college marks: 880 - 1:53.1; Mile - 3:59.8; 3 Mile - 13:17

College Coach: Jerry Bean and Del Hessel

Typical week's training in college during Cross Country season:

"Sunday: a long run 15-20 miles. Monday: AM 7 miles, PM 8x3 min hard running with 2 min recovery. Tuesday: AM 7 miles, PM 16x300 yard hill up hard, jog down.

Wednesday: 7 miles AM, PM 8 miles steady. Thursday: AM 7 miles, PM 4x1 mile in 4:40 with 3 min recovery. Friday: AM 5 miles, PM 6-7 miles. Saturday: Race. If no race,

(Chris Ridler - continued)

then a steady state run. Training covers about 100 miles per week."

Tips for college runners wanting to achieve success: "I think that dedication is very important, and you must set high goals. Still you must enjoy the sport and remember that you only get out of the sport what you put into it."



Chris Ridler of Western Kentucky and Dave Taylor of Oregon are shown during the 1975 NCAA meet at Indiana University

Name: James K. Rotich Height: 5'5" Weight: 120 lbs

High School or Secondary School attended: Kericho High School

Best Marks in High School in the following: 880 - 1:50;

Mile - 4:08; 3 Mile - 15:01

High School Coach: H. Nyamau

Typical training week during Cross Country in High School:

"Morning consisted of 4-6 miles easy Monday to Friday.

Afternoon workout was 6-8 miles."

What made you successful in High School? What ideas would you recommend to young aspiring runners just starting?

"I constantly trained according to my schedule. For a young starter I recommend 4 miles in the morning easy and 6 miles in the afternoon."

Best college marks: 880 - 1:49; Mile - 4:01; 3 Mile - 14:07;

6 Mile - 29:10

College Coach: Sam Bair

Typical week's training in college during Cross Country season:

7 miles easy in the morning from Monday to Thursday.

10 miles with my teammates Monday to Wednesday. Thursday intervals training with my Coach. Friday 6 miles easy.

Saturday hard workout.

Tips for college runners wanting to achieve success: Cover about 100 miles a week. Hill workout once a week and interval training once a week.

Name: Kip Sirma Height: 5'5" Weight: 120 lbs

High School or Secondary School attended: St. Patricks
Secondary School, Eldoret, Kenya.

Best Marks in High School in the following: 880 - 2:12; Mile -
4:24; 2 Mile - (:00; 3 Mile - 14:00.

High School Coach: Brother Marcellus

Typical training week during Cross Country in High School:

"Monday and Friday hill work, Tuesday 10-16 miles,
Thursday - speed work, Saturday - rest and Sunday - 4-6
mile walk."

What made you successful in High School? What ideas would you
recommend to young aspiring runners just starting?

"Being interested in running sports. Runners should not
be forced to do what they do not want to do but left to
have a wide variety in their choice of events."

Best College marks: 440 - :58; 2 Mile - 8:48; 3 Mile - 13:49;
6 Mile - 28:37.

College Coach: Ted Banks

Typical week's training in college during Cross Country season:

"Monday and Friday hill work, Tuesday 12-20 miles,
Thursday speed work, Saturday rest, and Sunday 6-8 run."

Philosophy on workouts: "Monday - hard, Tuesday - easy,
Wednesday - medium, Thursday - hard, Friday - easy,
Saturday - medium, Sunday - rest."

(Kip Sirma -- continued)

Sample workouts:

- A. "Cross Country in early season - mostly hill work and long road run."
- B. "Cross Country in late season - short hill work and short road work."
- C. "Track in early season - hill work and a few interval running."
- D. "Late season - distance running and interval running"



UTEP's Kip Sirma at the 1976 NCAA championships

Name: Tony Staynings Height: 5'6 1/2" Weight: 130 lbs

High School or Secondary School attended: St. Bernadettes',
Bristol, England

Best marks in High School in the following: 880 - 2:02; Mile -
4:15; 2 Mile - 9:05; 3 Mile - 14:00; 6 Miles - 28:47.

High School Coach: Ivor Edmonds

Typical training week during Cross Country in High School: "I
trained 2 times a day all year round--no track work, but
mild form of interval work on grass--90 miles a week
average. (Monday - 5 AM and 9 PM; Tuesday - 5 AM and
8 PM fartlek, Wednesday - 5 AM and 10 PM; Thursday - 5 AM
and 8 PM (5x200 on grass); Friday - 5 AM and 5 PM on grass;
Saturday - Race and 5 miles PM; Sunday - 11 PM (total
94 miles)"

What made you successful in High School? What ideas would you
recommend to young aspiring runners just starting? "I
was never good in team sports so I developed interest in
track at age of 14. I became very dedicated to training
hard at an early age (i.e. high mileage)."

Best College marks: 440 - 52.5; 880 - 1:53.7; Mile - 4:05;
3 Mile - 13:08; 6 Mile - 27:32; Steeplechase - 8:27.4.

College Coach: Jerry Bean and Del Hessel. (All the time getting
advice from Ivor Edmonds.)"

(Tony Staynings - continued)

Tips for college runners wanting to achieve success: "Don't
rush things, and remember one thing, you only get out of
track (or any sport) what you put into it! At the same
time, Enjoy It!!"

Name: Wilson Waigwa Wakihuri Height: 5'8" Weight: 145 lbs

High School or Secondary School attended: South Tetu School

Best marks in High School: "Never timed."

High School Coach: "None"

Typical training week during Cross Country in High School: "None.

Maybe walking to and from school which was about 8 miles
one way."

What made you successful in High School? What ideas would you
recommend to young aspiring runners just starting? "I
ran because it was required whenever there were some
track meets."

Best High School Marks: "None recorded."

College Coach: Ted Banks

Typical week's training in college during Cross Country season:
"7 miles Mondays, Wednesdays and Saturdays, if not
competing - easy jogging Tuesdays, Thursdays, and
Sundays and Fridays."

Tips for college runners wanting to achieve success: "Must be
ready to work hard and to be mentally ready to compete."

Best marks: 880 - 1:49.9; Mile - 3:55.6; 2 Mile - 8:52.8;
3 Mile - 13:29.

Honors in U.S.: "Six All-American awards."

How many Cross Country races do you run per year? "7"

(Wilson Waigwa Wakihuri - continued)

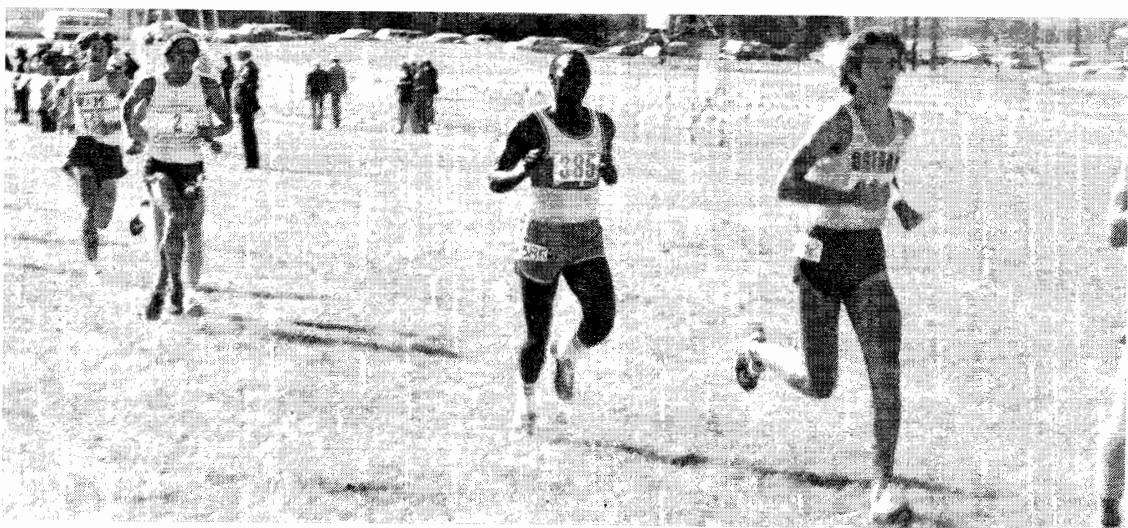
How many Indoor races per year? "5"

How many meets during Outdoor season? "10"

What do you think has made you a successful runner? "Hard work mostly and encouragement from my coach (plus his experience)."

Sample workouts:

- A. "Cross Country in early season - long road runs with medium pace."
- B. "Cross Country in late season - 6 to 8 mile road runs with medium pace most of the way."
- C. "Track in early season - 6 to 8 mile road run."
- D. "Late season - 6-8 miles two days a week and at least some work on the track every two weeks."



Wilson Waigwa following Albert Salazar of Oregon during the 1976 NCAA meet at Denton, Texas

Name: Bob Wallace Height: 5'6" Weight: 120 lbs

Born: Melbourne, Australia

Best Marks: 440 - :55 ; Mile - 4:14.2; 2 Mile - 8:51.5; 3 Mile - 13:54; 6 Mile - 28:45; Steeplechase - 9:02.

"Tips for Training:

1. Proper Warm-up: Before a race or any workout an adequate warm-up with stretching should be taken. The shorter the race the more important the warm-up and stretching.
2. Regular Training: The only way a distance runner is going to be successful is by training regularly. That means every day of the week and preferably every day the year.
3. Train Scientifically: Find a schedule that suits you as an individual. A "hard-easy" schedule is good because it allows the body to recover after a hard workout. There is no use in training hard every day for a week or two only to find yourself "burnt-out" or injury ridden.
4. Training Twice a Day: This method allows the runner to increase his mileage and get rid of any lactic acid from a hard workout the day before. Many runners train twice a day, but there are exceptions. The second workout of the day, whether it be in the morning or late evening, should be an easy run of 3-6 miles. When starting on

(Bob Wallace - continued)

double workouts it takes a week or two, from my experience, to get used to it physically. Running twice a day can be an individual thing.

5. Get Adequate Rest: Running is demanding and getting adequate sleep is important. What is adequate for one person may not be adequate for another, but your performances will reflect a lot about your sleeping habits.

6. One Long Run a Week: This run doesn't have to be hard but rather a relaxing run while getting in important mileage. Sunday is a good day for this.

7. Weights: The arms and upper body are important in distance running. The arms determine the quickness and length of the stride whether it be running a hill in cross country or kicking at the end of a race. Light weights with 15-18 repetitions help the overall strength of a distance runner.

8. Peak for Certain Meets: You can't expect to make a P.R. in every race so pick out a couple of meets where you want to do well and train towards them.

9. Have Fun: Distance running is hard. It involves a lot of work. But if there's no fun in running, then your motivation will soon be gone and there won't be too much success or enjoyment in it for you.

(Bob Wallace - continued)

10. Set Seasonal Goals: Obviously not everyone can be the No. 1 man on the cross country team, or be the best 3 miler in the conference, so set your goals accordingly. Goals should be hard to obtain, but realistic. Goals should be in terms of times for the events you run, or the place you think you can finish in the conference meet. There are few runners who go through the season undefeated, setting new records along the way to stardom. You can still be successful without winning and that should be enough motivation to train for the next season."

Name: Jeff Wells Height: 5'11 1/2" Weight: 140 lbs

High School attended: Madisonville High, Madisonville, Texas

Best marks in High School in the following: Mile - 4:36.6;

2 Mile - 10:36.

High School Coach: Gayle Cosby

Typical training week during Cross Country in High School: "My high school did not have a cross country team. I played basketball (and also football in my 9th and 10th grade years), but I did a little running before the school year started. In addition, during my last year, I did some running outside of basketball during the fall and winter."

What made you successful in High School? What ideas would you recommend to young aspiring runners just starting? "Though my times were not very fast, I think it was helpful for me to do morning runs and I would recommend this. Underlying any success I had, was the ability given to me by God."

Best college marks: Mile - 4:05.66; 3 Mile - 13:25.2; 10,000 - 28:27.27.

College Coach: Augie Erfurth, Bobby May, Steve Straub

Typical week's training in college during Cross Country season:

"Sunday - long run (12 miles); Monday - AM-6 miles, PM-intervals on grass (16-440); Tuesday - AM-6 miles, PM-9 miles fartlek; Wednesday - AM-6 miles, PM-10 miles easy;

(Jeff Wells - continued)

Thursday - AM-6 miles, PM-6 miles; Friday - AM-3 miles, PM-3 miles; Saturday - race. (Training weeks varied considerably; sometimes there might be one interval day and no fartlek; this would be an example of a week before an important meet.)"

Tips for college runners wanting to achieve success: "Foremost, all runners should give 100 per cent effort and trust God to meet their needs. I would advise runners to trust God for every aspect of their running. I don't think physical factors are nearly as important as spiritual and mental factors, and I would suggest that the importance of the latter be recognized. Though this might be quite commonplace, I think relaxation is very important."

Name: Antonio Carlos Zuniga Age: 21

Best marks: 440 - 50.1; 880 - 1:52; Mile - 4:09; 2 Mile - 9:05; 6 Mile - 29:33.

Philosophy on workouts: "My philosophy on training is to continuously be thinking about success. Since high school I've always thought in my mind the way you run in practice is the way you'll run in a meet. Plus I was continuously thinking of my old motto, "Winning isn't everything. It's the only thing." In my philosophy of running I've always tried to get in a lot of distance LSD (long-slow-distance). The main thing is covering the mileage. The main object I've also found out while doing workouts, is watch your form and "train don't strain."

Do you weight train exercises? "Yes, I do weight training on Monday, Wednesday, and Friday. I weight train up until a day or two before a race. In weight training I start out with light weights and long reps for endurance. I later change to a little heavier weight with short reps. This is for strength."

Cross Country training: "Basically in early cross country season I try and get a good background by getting a lot of distance. But, early in the season we come back so we can run 5 to 6 miles at 5 minute pace. A typical workout for the early season is: 6x330 on the track, then hit the road for 9 to

(Antonio Carlos Zuniga - continued)

10 miles of 5 minute pace running. We get back to the track and finish off with 6x330 again. In this workout in the early season we do this mainly to try and finish the workout. Also, we do some intervals in the park. A park workout consists of maybe 4x1 lap, 4x1/2 lap, 2x2 laps, 5x length of park or 5x1/2 length of park and shake out." In late season, we continue our road runs, but we add intervals--a quicker pace at the park and we do 5 reps of everything, 1, 2, 1/2, laps. We continue to work on our hills, but we run harder and longer. We have days that we go to the golf course, our home course, and run some repeat 1 miles in 4:40, 2 1/2 miles, 1/2 mile, quarters, then we end with hills. Each of these repeats are ran on pace or better."

Chapter XIX

GLOSSARY

1. Interval Training - The most scientific method of training runners, where there is a set distance to be run at a set time, with a set recovery, and a set number of repetitions.
2. Fartlek - A Swedish method of training where the runner runs as he feels. The pattern follows a jog - stride - sprint pattern. It is performed over pine-needle paths in the Scandinavian countries. For best results it must be used by the mature runner. Should not finish with beat feeling but feeling of being "refreshed."
3. Hard Day - Refers to my training philosophy. I advocate a hard workout day where intensity is quite demanding, followed by easier day.
4. Easy Day - The mileage will be about the same as on a hard training day, but the intensity of effort will be much less.
5. Quality - Refers to workout patterns. Quality is where the coach runs the athlete less volume but strives for faster times on the training distances. Usually stressed toward the end of the season in preparation for the big meets.
6. Quantity - Refers to a type of workout where the athlete is striving for more volume (lots of miles) as compared to less

miles and faster training times (quality). Usually stressed during early and mid-season.

7. Warm-up - The preliminary running and stretching of the body to get ready for a workout or race. It is the necessary preparation to get the body and mind ready for the work.

8. Cooling Off or Shake Out - The period after the workout where the athlete gradually cools off with "easy jogging" and walking. It prepares the body for rest and makes it easier to perform work the next day because it helps rid the body of some of the waste products that have been built up from the day's activity .

9. Grays - Refers to a less inexpensive type of sweat suit. Usually costs about \$10.00 for a set as compared to \$25.00 or more for a suit pair.

10. Short Term Goals - May be a goal set by the runner and coach for the week's competition. Always covers a short period of time.

11. Long Term Goals - Is a goal set by the coach and athlete over a longer period of time as compared to short range goals. Would usually be for a season or several years, like a goal of making the Olympic team.

12. Stretching Exercises - Exercises that are performed to make the body better prepared to perform exercise. The stretching

of the muscle cuts down on the resistance and better prepares the muscle to perform work, with injury less likely.

13. Oxygen Debt - is a condition experience by runners where the athlete cannot replace the oxygen as quickly as he uses it in a given bout of exercise.

14. Recovery Interval - The distance or time that is taken by an athlete during a workout to recover before performing the next segment of work in a given workout. An example would be 20 x 440 at 70 seconds with a 220 jog recovery. The recovery interval would be the 220 jog. The recovery interval follows every unit of work.

15. Repetitions - is the number of times a set exercise or training distance is performed in training. An example in weight training would be 2 sets of 10 repetitions. In running a repetition would be each time a runner ran a 440 in a practice session.

16. Sets - In weight training refers to the number of times a person will perform a certain number of repetitions. Example, 2 sets of 10 bench presses (or 20 total repetitions).

17. Full Range - Refers to the movement in weight training. The athlete should always do the exercise completely so as not to limit the movement of a specific muscle group that the athlete is trying to strengthen with a certain weight training exercise.

18. Lactic Acid - A by-product built up through exercise that eventually will result in the athlete tying up in a race. Causes the legs to stiffen up.

19. Pulled Muscle - Where the athlete actually pulls the muscle loose from either end where it fastens. Either the origin or the insertion.

20. Strained Muscle - Where the athlete stretches the muscle, but it does not actually tear loose. Not as severe as the pulled muscle.

21. Stress Fracture - A type of break in the bone that is most common among distance runners. The bone is not usually broken completely across. Is sometimes difficult for the doctor to pick up on an x-ray.

22. Psychologically Toughening - Through training it is the process where the coach gets the athlete to believe he can do certain things in a race having achieved similar feats in practice.

23. Blister Prone - More likely to get blisters than the average run of the mill athlete. May have tender skin.

24. Achilles Tendon - The tendon running down the back of the heel. Is an area that gets very poor blood flow and therefore, heals very slowly once injured. Should encourage athlete to stretch this area before starting workouts.

25. Psychological Preparation - The art of getting a runner mentally ready to run his race. Covers all areas of "so called"

anxiety spots that must be covered for the athlete to be ready to perform.

26. Running Mechanics - Refers to a runner's form or style.

How he looks. Does he coordinate his arm swing with his leg action or stride.

27. Rhythm - Coordinated movement between the arms and legs.

It is very important to conservation of effort and how smooth and effortless a runner looks when he runs.

28. Transition - The change of form that should take place when a runner tries to sprint at the end of a race. His arm action changes from a loose relaxed form to a short hand pumping relaxed action. The arms move through a smaller arc, thereby cutting down the stride length for better control when fatigue begins to set in.

29. Indian File - A game that is played in training for cross country where the runners jog or stride in single file. The coach blows his whistle or gives some other type signal and the end (last) runner sprints by and takes the lead. The rest of the runners follow the leader. This sequence is repeated many times.

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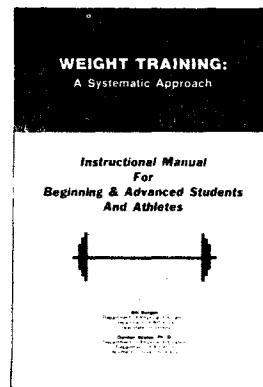
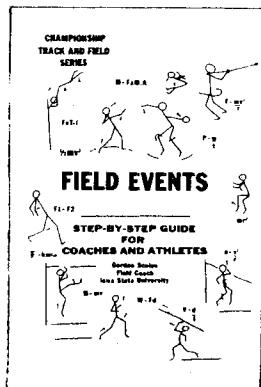
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